

ARE TRADE UNIONS OBSTRUCTIVE?

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AN IMPARTIAL INQUIRY

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INTRODUCTION

TO MOST OBSERVANT MEN AND WOMEN of to-day, industrial conditions present a challenge. The facts are simple. Knowledge and technical skill have so far advanced that an ample supply of the necessities of life can be assured by existing methods of production. Further, production could, with little difficulty, be greatly increased ; we are nowhere near capacity output. And yet large numbers of persons are denied that measure of security which should be theirs. There has been a dislocation in the chain connecting production and consumption, and a failure in the distributive machinery. Work, once a curse, has become a blessing ; and a blessing that—paradoxically enough—is being withheld because the fruits of man's labour are too abundant.

This failure to obtain prosperity commensurate with productive capacity indicates a want of adjustment between different parts of the economic process. As the business of production becomes more intricate so the need is greater for a flexible instrument which can be easily and speedily adapted to meet changes in methods. The industrial machine is delicately balanced, resistance in any one part of it can slow down the whole.

There are many parts of the machine which have been criticised on the ground of undue rigidity. To take, as does this book, one such part and to subject it to detailed investigation is not to suggest that it alone, or more than other parts, is in need of overhaul. Rather the object is an impartial scientific inquiry deliberately restricted to compassable limits. Whatever may be held to be proved or disproved within these limits is in no sense a guarantee that the rest of the machine is in perfect order. A fault in the ignition system is no proof that the tyres and batteries do not need inspection. It may even be that the whole machine is out of date, but with that great question the authors of this inquiry are not here concerned. They are concerned, not with industry as it might be, but with

industry as it is, with the conditions upon which our immediate livelihood and well-being depend.

The part of the system which is under examination here is that which affects the trade unions primarily—namely, the stipulations which they make as to the conditions of employment in industry. It is often suggested that obsolete restrictions upon the flexibility and mobility of industry are imposed by the trade unions. More specifically it is alleged that these restrictive practices have been an important factor in encouraging the drift of industry to the south. Employers have felt that it would be advantageous to move to fresh ground, where traditions and practices are not so firmly rooted. These things are so freely stated that it seemed worth while to carry out an impartial investigation of the matter. This has been done, and the results are here embodied.

Those responsible for the inquiry embarked upon it with no preconceived notions as to what the outcome would be, and with no brief or bias either for the trade unions or the employers. They knew, as everyone who keeps eyes and ears open must know, that charges of obstruction, and worse, on the part of trade unions are constantly being made, and they wanted the facts. No one had them. They could hear it said the trade unions had failed to recognise their responsibilities in a time of grave economic emergency; that they had clung obstinately to outworn forms; that they had failed to observe changes which, in the passage of a generation, have radically affected the whole structure of industry throughout the world, but which they continue to regard as immutable: in short, that the unions were refusing to face the fact that the greater problems which beset industry to-day are due to influences as deep and as wide-reaching as those which raised them up in the first place to be the safeguard and bargaining representative of millions of employed persons; that their rigid adherence to forms and ideas which are no longer applicable to the relations of capital and labour were acting powerfully against the present recovery and future prosperity of industry as a whole. These things were freely alleged; but no one knew the facts.

On the other side it was being said with equal sincerity

that the fault lay almost entirely with the employers. They failed to realise the aspirations, abilities, and outlook of the persons who worked for them, and who saw the structure of industry from below and at close quarters ; they had never learned to regard their employees' organisations as anything but weapons of offence directed against themselves, and had studiously refused that co-operation which would have enabled industry in all its ranks to adapt itself to changed circumstances ; they were as bad as, or worse than, the trade-union leaders—lacking the vision either to recognise the portents of social and economic change or to admit the workers to any effective share in the real control of industry. But again there was no body of information to support the charges.

The bickering (it can hardly be called controversy) that goes on from year to year had left those who desire to know the truth of things puzzled and uneasy. The facts were difficult to ascertain, and the lack of them had bred uncomfortable doubts lest, on the one hand, behind this talk there should be something which was seriously retarding the recovery of our industries ; or lest, on the other hand, such mutterings should create a public opinion which, ignorant of the facts, might demand or endorse political action against institutions rendering invaluable service to our industrial order.

To ascertain the facts, present them, ponder them, and comment upon them was the one and only purpose of this inquiry.

The stipulations successfully insisted upon by trade unions are to be found embodied in those collective agreements which, after negotiations between the two sides, are signed by the responsible parties and remain the documentary basis of conditions of employment. The investigators have had recourse constantly to these documents. They have also consulted, where practicable, published records of the negotiations which led up to the agreement. But they have not been content with written matter ; they have conferred with those who were and who are responsible for the agreements and for their due observance. The evidence is therefore as comprehensive as it could be made.

Obviously, it was impossible to cover the whole industrial field, so thirteen industries were selected representing different and important aspects of the economic life

of the country. For each of these industries a uniform procedure was followed. First, the spokesmen of the employers' organisations were interviewed, as were representative employers, and the statements so obtained were recorded. That process completed, the records were collected into one ordered statement, in which variations of opinion were noted and due emphasis was given to those points on which there was a considerable measure of agreement.

These statements were then presented, along with a summary of the general argument, to the trade unions concerned, for their consideration and comment. Leading union officials were interviewed. Every effort was made to obtain the opinions of representatives of all the chief sections of the workers within each chosen industry. The comments of the trade unions, their replies to the allegations, their counter-allegations, and their declarations of general policy were then examined and collated in the same way.

Thus the method of investigation was to tap as many sources of information as possible, but to leave the actual making of the case, and the argument upon it, to the representatives of the two sides. The rôle of the investigators was to collect and to co-ordinate, to assure themselves as far as possible of the accuracy of the statements made, and then to present fairly and temperately the views of all the parties.

In furtherance of this end, decisions had to be taken at the outset on two questions of policy. In the first place, it was obvious that, unless both sides were prepared to give unfettered expression to their opinions, the real issues would go unrevealed. For this reason it was decided that all information obtained should be regarded as confidential in the sense that the persons giving it should not be named. That assurance was given to all who were interviewed; and its consequences, for good or for ill, are seen in the anonymity of the witnesses quoted. That need occasion no misgivings. The authors vouch for it that they are, one and all, people of knowledge and credit, entitled to speak as representatives of their various trades and industries.

In the second place, it was necessary that, in preparing the body of the report, the authors should have no other

concern than to present a faithful rendering of the freely-expressed points of view of the employers and the trade unions. This meant that a great measure of freedom had to be left to the persons interviewed, not only as to the form in which they presented their views, but also as to the interpretation which they put on the phrase "trade-union restrictions." Vagaries both of interpretation and of form will accordingly be found reflected in the evidence as presented. Where concrete examples were given, they are rendered in the text. Where the witnesses preferred to speak in general terms, their preference has been equally respected.

The result is that the employers' case, in the several industries, is not always presented from the same angle. Further, these variations of approach affect the trade-union reply, for the statements of the unions have in general been shaped by the line of argument put forward by their employers. Again, the trade-union statements themselves differ in content, since some of them have turned defence into attack, arguing that the real bar to efficient progress is to be found in causes for which the employers, not the unions, are responsible. So far as possible within the limits at their disposal the investigators have taken these variations of outlook and expression into account.

They have, however, set out the report for each industry according to a common form. Each report is divided into four sections: Introduction, the Employers' Point of View, the Trade-Union Reply, and Summary. The introduction, in every case, contains a brief description of the industry concerned, together with the state of employment in October 1934.¹ Particulars are given of the employers' and workers' organisations, and of any existing machinery for securing agreement between the two sides. Mention is also made of any special characteristics or problems peculiar to the individual industry. In fact, the introduction sets out to give, for the convenience of the general reader, a brief survey of those facts concerning each industry which have relevance to the inquiry. The employers' and trade unions' reactions give the evidence, marshalled under three general headings. In order to ensure that these sections should be as accurate and

¹ Where not otherwise stated, figures and statistics relate to October 1934.

comprehensive as possible, they have in every case been submitted for revision and review to the persons originally supplying the information. The final section of each chapter contains the authors' summary with regard to the particular industry under consideration.

Treating each industry separately in this way has obvious practical advantages, and allows due consideration to be given to individual problems and special circumstances. But it also has its drawbacks. To look upon these "restriction" issues as a collection of unrelated discordances would be a profound mistake. The careful reader will become aware, as the recital proceeds, of a "labour" attitude and an "employer" attitude, which seem almost to dictate the nature of particular manifestations. It follows that, while in some cases the remedy for "restriction" troubles is within the action of the particular industry, in others it is a matter for a change of attitude and policy on the part of the trade-union and employers' organisations as a whole. The authors have, therefore, devoted a concluding chapter to a general summing-up of the results of the inquiry.

In this last chapter their personal opinions are not excluded. It would, indeed, be an admission of cowardice if they were. The reader is entitled to expect that those responsible for the inquiry should give some indication of the value that they attach to its result. He may not agree with their estimate, and, in fact, it is his conclusion, not theirs, which matters in the long run. That the final verdict, and its consequences, must rest ultimately with the public, the authors fully recognise; in stating their own conclusions they are only attempting to give their own reading of the evidence they have collected.

There is another partner in industry in addition to capital and labour, and it would be doing a disservice to both employer and unions to suggest that, when their points of view have been stated, the last word has been said. The consumer also has a right to be heard. He is vitally interested in both standpoints since, in any highly organised industrial community, he is both an employer of labour—if only indirectly—and one who expects to be employed by his fellows. The authors and each reader of this book have common cause as consumers, and as such have right and interest in expressing opinions on the

evidence here collected. The last chapter is set out as a consumer's attempt to review some aspects of the relationship of capital and labour, according to the needs and interests of the community, without conscious bias towards either side.

One other point should be mentioned here, which is discussed at greater length in the final chapter.¹ In this inquiry the authors have not included as a "restriction" the fundamental trade-union wage policy of attempting to secure and maintain the highest practicable general level of wages. They have, however, included the trade-union enforcement of particular rates which are, or have become, out of relation to rates in comparable occupations.

There remains but the grateful task of thanking all those who have given generously of their time and knowledge to the building of this book. Throughout the investigation, employers and employees alike have shown themselves anxious to render all the assistance in their power, and such value as the work may have is due to their unselfish co-operation. The authors are deeply grateful, not only for the wealth of facts and experience they have supplied, but also for the manner in which they have given it. They have been patient in explaining technical points, courteous in producing full and detailed information, careful and thorough in their criticisms, and encouraging in the interest and sympathy they have shown in the objects of the investigation. The authors have been very deeply impressed by the evident desire of both capital and labour, in many instances, to co-operate for the common good of the industry which they jointly serve. It is, surely, a most significant sign of the present strength and future progress of our industries that there are in them so many men of ability, experience, and goodwill, who recognise the necessity of full and free co-operation between all ranks as a foundation of industrial well-being.

¹ See *post*, p. 312.

THE BUILDING INDUSTRY

I. INTRODUCTION

THE BUILDING INDUSTRY plays an important part in the industrial life of the nation. There are some 50,000 concerns engaged in building and public works contracting in Great Britain, and it is estimated that, in 1930, the trade turned out work to the value of £364,000,000.¹ Its representatives claim that it must be regarded as a basic industry, since all other industries, at one stage or another, rely on the co-operation of the builder.

The industry is not concentrated in particular areas, but is distributed very generally over the whole country. It depends to a greater extent than most on favourable weather, and the difficulties of open air work in the winter, together with the shorter period of daylight, make the work largely seasonal. The importance of the weather factor in the organisation of the building industry is particularly noticeable with regard to the operatives. It means that the men, for the most part, are engaged on an hourly basis, and there can be little sense of security when employment depends on the vagaries of the climate.

A feature of the industry in recent years has been the trend towards larger units of business, accompanied by an increase in the number of firms specialising in one aspect of the trade. Many of the bigger firms of general builders now sub-contract such work as plumbing, decorating, or joinery, instead of themselves engaging the appropriate craftsmen. No doubt some increase in specialisation is inevitable, and is in part due to the development of new materials and new methods of construction, but the fear is expressed that the results may not be to the advantage of the industry as a whole, and the suggestion has been made that the specialists do not always recognise as they should the overruling authority of the contractor.

According to the Ministry of Labour returns there were, in October 1934, 928,250 insured persons registered as

¹ Figures supplied by the Building Industry Council of Review.

being, or having last been, in the employ of firms belonging to the building industry, of whom 17·8 per cent were wholly or temporarily unemployed. Slightly more than half of the workers are skilled men who have served an apprenticeship. The principal trades in the industry are bricklaying, plastering, slating, masonry, carpentry and joinery, painting and decorating, and plumbing of various kinds. There are also a number of ancillary occupations, such as sawmilling, structural ironwork, glazing, and so forth, but these employ comparatively few people, and are not generally reckoned as belonging exclusively to the building industry.

Both employers and workers in the industry are fairly well organised. The chief of the employers' organisations is the National Federation of Building Trades Employers, which is representative of most of the sections within the industry. In a few crafts the employers have organisations which have not joined the federation; such are the National Federation of Plumbers and Domestic Engineers (Employers), and the National Federation of Slate Merchants, Slaters and Tilers. Though these latter are primarily concerned with matters affecting their own trades, they have, on occasion, joined with the National Federation of Building Trades Employers to negotiate national agreements covering the whole industry.¹

The organisation of the operatives corresponds in some degree to that of the employers. Each class of workers has its appropriate union, and there is, in addition, a central association—the National Federation of Building Trades Operatives. This body does not in any way take the place of the unions, which preserve their separate organisations, but represents the interests of all the workers in the industry in matters of national importance. “We co-ordinate the organisation of the unions, and settle difficulties which may arise between them. We really control the high economic policy of the unions in the building trade. We conduct all industrial disputes, and we assist the unions in the payment of dispute benefits. We act as Parliamentary liaison for the unions, and have certain of our members in the House. We read all projected legislation and arrange all propaganda with reference to the same, and generally watch the economic and political interests of the workmen in the industry.” All the more important unions

¹ e.g. see agreement mentioned on p. 18.

are affiliated to the federation, which claims to represent a membership of about 360,000 of the 800,000 odd employees in the industry.¹

Each of the crafts within the building trade has its union. The largest of these are the Amalgamated Society of Woodworkers, the Amalgamated Association of Building Trade Workers, the Plumbers', Glaziers' and Domestic Engineers' Union, the National Society of Painters, and the National Association of Operative Plasterers. The extent, however, to which the workers in each trade are effectively organised varies considerably. The woodworkers, for instance, claim to have enrolled 96 per cent of those eligible for membership, but the average for craftsmen as a whole is only just over 45 per cent. Of the unskilled workers it is estimated that about 30 per cent are organised, and some of these are members of either the Transport and General Workers' Union or of the National Union of General and Municipal Workers. The chief organisations within the industry for unskilled workers are the Altogether Builder Labourers and the National Builder Labourers' and Constructional Workers' Society.

The two general labour unions mentioned above are also affiliated to the National Federation of Building Trades Operatives, but they have members, of course, in a number of other industries. The craft unions are more definitely building-trade organisations, but they are not all necessarily confined to workers in the industry. Of the 24,900 members of the plumbers' union, for example, approximately three-quarters are engaged in the building industry, while the rest are employed in the engineering, shipbuilding, and chemical trades. As a consequence, all plumbers must qualify in the three principal branches, house plumbing, ship plumbing, and chemical plumbing. The union has to meet the varying requirements of several industries, yet, in the opinion of an impartial authority, "it is noteworthy . . . that the trade of a plumber remains, in an industrial sense, a coherent and unified craft."²

The organisations which have been described in the

¹ According to the Ministry of Labour, the total membership represented by the National Federation of Building Trades Operatives is not more than 250,000. This figure is calculated on the basis of the affiliation fees paid.

² *The Plumber's Trade and Training*, Board of Education Educational Pamphlets, No. 65, at p. 15.

preceding paragraphs comprise the two sides of the National Joint Council for the industry in England and Wales.¹ The council provides the machinery for negotiating agreements on all important matters relating to working conditions. It deals with rates of wages and grading, working hours, extra payments, overtime, etc., and also with disputes which may "be referred to the council by either the employers or the operatives with a view to an amicable settlement of the same without resort to strikes or lock-outs."²

Under the regulations of the National Joint Council the country is divided into regions, each with its Regional Joint Committee. These latter have certain powers delegated to them by the council, and serve as a link between that body and the localities. They are composed of an equal number of employers and operatives, not exceeding thirty, and they have power to appoint Area Joint Committees to assist in carrying out the working rules, both local and national, of the industry. While they can make certain variations in the national agreements to meet the needs of the localities, they have no power to vary the grade classifications of the towns and districts within their regions. This classification, which is the basis of the national wages agreement, is fixed by the National Joint Council, and is subject, on appeal, to revision by that body.

In estimating the effects of any trade-union restrictions which may exist, it should be remembered that building is a sheltered industry. While it is true that that part of the trade which builds for the exporting industries is affected by depression in those industries, this does not vitiate the general conclusion that the industry is sheltered, in that it has nothing to fear from foreign competition. It enjoys a monopoly in the supply of an essential commodity. Further, owing to the urgent need for houses after the War, house building has been, and to some extent still is, subsidised out of public funds. If its costs are unreasonably high, the public bears the burden, either directly in the form of increased rents, or indirectly through rates and

¹ There is a separate National Joint Council for Scotland, but this does not cover either the plasterers or the painters.

² Clause 5 (b), Memorandum of Agreement, adopted by the National Joint Council of the Building Industry, January 14th, 1932.

taxes. One employer states categorically that there are a number of unnecessary trade-union rules to which the employers have agreed "as the easiest way out of a difficulty." He continues, "Building is a sheltered industry, and the additional costs due to trade-union restrictions are passed on to the consumer."

II. THE EMPLOYERS' POINT OF VIEW

Conditions in the building trade vary somewhat from district to district, and from firm to firm. Roughly speaking, the results of the inquiry suggest that the unions are stronger in England than in Scotland, and strongest of all in London. The employers with large establishments seem fairly well content with the present conditions in the industry, and have little difficulty in working with the responsible union leaders. They have some trouble with minor officials, but, on the whole, they have carried specialisation to a point at which the strict rules of the various unions cause them comparatively little trouble. It is the smaller employer who is hard hit, and who complains that his costs are raised by trade-union restrictions which the big firms have not felt it worth while to oppose.

A. Recruitment and Utilisation of Labour. In theory, entry to the skilled trades in the industry can only be secured by serving as an apprentice or a learner. The industry is honeycombed with schemes regulating conditions of apprenticeship, organised on a craft, regional, or national basis. All of them recognise the principle of limitation of entry, and in 1925 an agreed scheme was drawn up by the Joint Industrial Council establishing rules for each district. In London the proportion is one apprentice to every five journeymen in any one trade, provided the proportion for the whole trade in the area is not more than one to seven; in Yorkshire it is one to four, with a limit of seven per firm in any one section; and in Scotland it is one to three at first, and one to four thereafter.¹

The apprenticeship system has the approval of both employers and workers, who, in many cases, co-operate in

¹ Wherever work under the 1924 Housing Act is in progress, there is an overruling agreement allowing a general proportion of one apprentice to three journeymen.

its administration.¹ Such criticism as has appeared is directed, not against the system, but to the effect that sufficient use is not made of it, particularly in taking advantage of facilities for technical education. Limitation of entry is an accepted principle, but there is general agreement that one craft—the plasterers—has pushed it too far. When trade is good, there is a shortage of plasterers, and, though the suggestion has been made that it is too dirty an occupation to be popular with boys, employers hold that the craft has taken advantage of its strong organisation deliberately to restrict the supply of skilled labour.

In the employers' view it was by this means that, in the past, the plasterers were able to secure a higher rate of wages than other crafts. These extra payments are now either withdrawn or in process of being withdrawn. The employers believe, however, that this is not due to any change of policy on the part of the union, but to the fact that the trade has been forced to develop the use of other materials, such as beaver-boards, machine-made plaster boards and Celotex, to take the place of plaster wherever possible. They contend that this is a clear case of a union holding up the proper development of the industry to its own advantage.

The chief criticism of the unions with regard to recruitment of labour arises from the practice of accepting men as members who have not served a proper apprenticeship. Recently this practice has been growing. For instance, a man gets taken on as a brush hand, and, after gaining some experience, gets a skilled worker to propose him for membership of one of the painters' unions. Once he has been accepted and has paid his subscription, he is ranked as a skilled man entitled to a skilled wage. Similar instances are reported from other trades, and, in the same way, men who have commenced but never completed their apprenticeship can gain admission to the unions. The employers contend that this practice is unfair, and liable to increase costs. Unless they have personal knowledge of a man, they are bound to accept his union membership as evidence that he is a skilled craftsman. The onus of discovering a man's true capabilities is put upon the

¹ e.g. there is an active Joint Council which deals with apprenticeship and technical education in the plastering trade.

employer, who may lose both time and money through putting a man who is really only semi-skilled on to a piece of delicate work. The unions insist that all their members shall receive skilled wages, but they will not take any responsibility as regards standards of workmanship.

As in all industries where a large number of crafts are concerned, there is trouble over demarcation between the trades. From the Council of Review of the Building Industry the statement was received that "there is no trouble with demarcation in the building industry at the present moment. In fact, the Demarcation Committee has been disbanded." Unfortunately, this pronouncement does not agree with evidence received from other sources. Instances have been provided from all over the country of difficulties arising through demarcation disputes. Probably it is true to say that the problem is not acute at present in the building trade, but it is equally true that there is *prima-facie* evidence supporting the charge that existing conditions could be reformed to the saving of both time and money.

According to the employers, one of the most fruitful sources of demarcation trouble is to be found in the borderline dividing plumbing from hot-water engineering. In one notorious case the whole work on a large contract was stopped for months because the hot-water engineers insisted on fitting all pipes, though much of the work was ordinary plumbing work and had been given to plumbers. The root of the trouble seems to be that there is no logical line of division between the two trades. One large employer of labour put the position in this way: "You have a wash-hand basin. The bricklayer cuts out and he fixes the brackets for carrying the basin. The plumber comes along and he fixes the basin. He also makes the cold-water connection. The hot-water fitter comes along and he brings his connection just to the floor level. He must not connect up from that point to the tap in the basin; and that, in my opinion, must increase the cost because it is overlapping of labour. The hot-water engineer is usually 1*d.* or 2*d.* an hour below the plumber's rate. This is just one of those antiquated laws of demarcation, or trade jealousy. There is no reason in the world why the hot-water fitter should not complete his job and connect up to the basin."

Another cause of demarcation disputes is to be found in the lack of co-ordination in planning the rules of the different unions. For instance, the bricklayers' rules provide that laying floors is part of their work, while the plasterers claim all work in which a plasterer's tool is used. This, of course, includes cement floors. And finally the tilers' union has a regulation that all work involving the laying of tiles belongs to its members. The confusion that can arise from these cross claims is well illustrated in the following case :

"I once had a big theatre job, and the pit was going to be tiled, and the bricklayers were going to do it because it was in their rules, and it suited us, but the plasterers had it in their rules as well. The plasterers had a lot of work to do, so the foreman put the bricklayers on to do the tiling. As soon as they started work the other men ceased work because they said it was a plasterer's job. I went to see them about it, and said we would put plasterers on. Then the bricklayers struck because they said it was their job. I eventually went to the people who were supplying the tiles, and told them about the trouble and asked them if they could let me have some tilers down from their place. As soon as the tilers came down, every man walked out of the job. . . . I said I could wait for the tiling to be done, and I would simply have to get the joiners to board it up. I did not say so, but this boarding was to be permanent, and I never put a tile on the place." Not only was time lost and costs increased through stoppages, but the final work was less satisfactory than it should have been, because boarding over had to be resorted to rather than risk further delay.

Some crafts will go to extreme lengths to enforce their claim to a particular piece of work. For instance, masons object to bricklayers laying facing stone on brickwork, claiming that the work belongs to the stone setters, who form a branch of their trade. On one big building in a northern town, the stone was being sent machine-dressed from the quarry for the bricklayers to set. The masons' union objected, and said that the stone must be dressed on the job, work which the bricklayers obviously could not do. It was pointed out that there were no unemployed skilled masons in the district, and the union answered that labour must be imported. This would have been so expensive

that it was cheaper to dispense with the stone work altogether, even though that meant paying compensation to the quarry owners for breaking their contract. Behaviour of this kind has encouraged the development of artificial stone, which can be set by bricklayers, with the result that the employment open to skilled masons is steadily diminishing.

The increased use of concrete, a comparatively modern development in the industry, involves the construction of wooden moulds or forms, and recently there has been some trouble in this respect. The work is usually done by carpenters, but it is contended that some of the rougher and repeat work could be undertaken by less skilled men, or even labourers. A case was reported from Scotland where a building contractor was making a dock. He employed shipwrights at 1s. 3d. an hour instead of joiners at 1s. 6½d., and a strike ensued because the two unions concerned proved unable to come to any arrangement.

Finally, a most important aspect of the problem is to be found in cases where the same work is done in two industries by different trades. An employer who is responsible for a great deal of building and contracting on a large scale explained the sort of situation which may arise. "Take many buildings in London, particularly where all your drain pipes are cast iron. Now in the building trade, with all that class of work—cast-iron drainage—you are compelled to employ plumbers, while in civil engineering work, if you have cast-iron pipes, as frequently happens, these are all jointed by pipe jointers. Pipe jointers in the civil engineering trade get 1s. 3d. an hour, whereas a plumber in the building trade gets 1s. 7d., and I will guarantee that a pipe jointer will make three joints to a plumber's one. The plumbers themselves really don't want the work, but they are compelled to undertake it by their trade union."

The instances of demarcation disputes given in the preceding paragraphs come from many parts of the country, and from both large and small firms. In part they are due to increased specialisation among the crafts, a process which in its turn is resulting in the disappearance of the handy-man. The unions are encouraging the process, and the big employer, who has a large permanent staff of craftsmen, does not object. But it must be admitted

that specialisation raises the costs on a small job very considerably. For instance, a door needs fixing—a small job—but strictly “you have to employ a bricklayer to knock a hole in the wall, a joiner to fit the door frame and the door, a plasterer to make good the damage done to the plaster by the bricklayer, and a painter to make good the paint work.” The small employer, in a district where the unions are strong, complains that he is considerably handicapped.

B. Hours and Wages. By the rules of the National Joint Council, the working week in the building industry is fixed at 44 hours, with provision for an extension to 46½ hours during the period of summer time. The rule can be varied slightly to suit local requirements. Overtime is also regulated by national agreement, and “shall not be worked except in cases of urgency, and shall not continue for more than six days consecutively unless by consent of a Local Joint Overtime Committee. . . .”¹ The rates for overtime are : first two hours, time and a quarter ; second two hours, time and a half ; thereafter, double time. The employers are definite that it is not worth their while to work overtime except in cases of necessity, such as bank or shop work which must be done at week-ends. There is general agreement that the unions do not unreasonably refuse to agree to overtime, and no serious criticisms have been offered.

Standard rates of wages have been established for the whole industry, and are revised from time to time by the National Joint Council in accordance with an agreed sliding scale depending on the Ministry of Labour index figures for the cost of living. The country is divided into grades, and there is a difference of 5*d.* per hour between the rates paid to craftsmen in London and those paid to similar workmen in the lowest graded districts. There is a flat rate for craftsmen of all trades, though this is subject to occasional local variation.

The working of the wages agreements appears to meet with general approval, except for some slight criticism regarding the provisions covering walking, travelling, and lodging allowances. The chief point at issue with regard to wages is one of principle. Many employers believe that

¹ National Working Rules, No. 4.

some system of piece work is desirable. The issue was raised when the national agreement was under review in 1931, but had to be abandoned in face of the resolute opposition of the unions. The employers argue that the flat rate penalises the good worker, and tends always to bring the average output down to the level of the slowest man.

Various attempts have been made to introduce methods of payment by results into the trade. An employer in a provincial town offered his men a guaranteed day rate, and a bonus on production. The men were inclined to consider the proposal, but the union officials intervened and refused even to discuss it. A similar scheme is actually in operation in a large London business. There a minimum wage is guaranteed, and a price set for each piece of work. If there is a profit on the price it is divided out among the men. The scheme has worked well and has certainly increased production, but it is not regarded as suitable for very skilled work. Information was also received concerning a big contractor in the north who pays his men on a piece-work system. The men receive two pay envelopes, one containing the ordinary day rate, and the other anything which may be due for increased output.

It is suggested that the unions have chosen to ignore these isolated cases, where piece work is in operation, because the men employed by the firms in question are in favour of the change, and opposition by the unions might lead to serious loss of membership. But in general it is clear that they stand for a flat rate fixed on a time basis. When the question was raised before the Building Industry Council of Review the representatives of the operatives were of the opinion that, as so much depends on team work, increased remuneration based on the individual output might be a menace to production. "Recognition of individual craftsmanship," they stated, "would only break the team spirit and would militate against reduction in costs. Increased payment on output, again, could not apply to individuals, but only to men on the job as a whole."

As a sidelight on the whole question of payment by results in the building industry, the experience of those contractors who also undertake civil engineering work is interesting. In this industry the men appreciate piece

work, and the unions have not been able to oppose it with any success. The result is, according to one employer, that in bricklaying, for instance, men engaged on civil engineering work would earn roughly 11*d.* per hour more than bricklayers in the building trade. "What we do with the men there is this. We say we will guarantee you your hourly rate, which is 1*s.* 7*d.*, but we will give you everything you make out of 4*s.* a square yard. We know that we can afford to pay 4*s.* a square yard for the brickwork, and, if these men set to, there is nothing to prevent them doing it for 3*s.*, 3*s.* 1*d.*, 3*s.* 2*d.*, or 3*s.* 3*d.*, and the men get the difference between that and the 4*s.* There is never any trouble." This is not true of all the trades which overlap between the two industries, but, so far as it goes, it affords an interesting comparison.

C. Restriction of Output. One of the main arguments advanced by the advocates of piece work is that it would lead to an improvement in output. There is a good deal of evidence, in the form of records kept by individual firms over a long period of years, which goes to show that the standard of output is lower than it was before the War. Statements have been received, both from Scotland and from the provinces, showing a drop in the average output per man of from 10 to 15 per cent since 1913. A bricklayer in 1913, employed in straight wall work, would lay, on an average, 80 to 90 bricks an hour on a nine-hour day; to-day, working an eight-hour day, he will lay from 60 to 70 bricks an hour.¹ In contrast to this, a small country builder, employing about twenty men, when asked what he considered an average day's output, replied, "I don't consider that I do a decent day's work unless I lay from 1,000 to 1,200 bricks a day on straight wall work. And, mind you, I'm a mason, not a bricklayer, by trade."

The evidence leaves little room for doubt that, in many cases, the level of output is lower than it used to be. The explanation given by most employers is that, on a flat rate, there is no incentive to work at any greater speed than that of the slowest man. One London firm, while agreeing with the reason advanced, suggested that the

¹ It is also asserted that whereas labourers used to carry nine common bricks they now carry only seven, "a definite reduction of effort of nearly 25 per cent."

difficulty could be overcome, and stated that they themselves had regained their pre-War level by putting their fastest men on the key positions to set a standard for the rest. This method is one way out of a very difficult issue, but it depends for its success on the co-operation of the better men. And it does nothing to vitiate the conclusion of the majority of the employers that the industry is suffering from under-production due to the policy of the unions.

One very important firm of builders takes strong exception to this view. They state that, if output is lower now than in 1913, the responsibility lies, not with the men, but with the masters. In their opinion, in nine cases out of ten, building employers have failed to take advantage of the greatly increased range of mechanical appliances and aids, and are still "practising the same methods of providing their workers with materials as they did in pre-War days." The reason for a drop in production is faulty management rather than trade-union restrictions. They do not deny that output could probably be improved if payment by results were adopted, but they absolve the unions from the charge of encouraging restriction.

An interesting commentary on this charge that the building employers are unbusinesslike is furnished by the Interim Reports of the Building Industry Council of Review. This body consists of representatives of all concerned in the building industry, and the council decided, in 1929, "to undertake a comprehensive review of the economic position and technique of the building industry and its associated interests." The First Interim Report puts forward certain conclusions, including the following: "Recent improvements in building methods have not been extended throughout the industry. There is wide scope for advance, both in the organisation of the industry as a whole, and of the work on the building site."¹ The Second Interim Report amplifies this conclusion, and recommends the adoption by the industry of the principles embodied in the Time and Progress Schedule. The council is of the opinion that there is ample scope in the industry for management reforms which will lead to substantial saving of time and reduction in construction costs.

The essence of the Time and Progress Schedule is that

¹ First Interim Report, p. 5.

“before any work is commenced on the site a schedule is drawn up in the form of a chart on which is set forth clearly and explicitly the sequence of all operations from the first excavation to the finishing touches of the completed building, and the time limits within which each operation must begin and end.”¹ Such detailed preliminary planning is not common in England, and the report continues :

“A common example may be noted in the amount of ‘cutting away’ that has to be done when decisions relating to plumbing, heating, wiring, and various other internal installations are left to a late stage. The opinion was expressed, in evidence submitted to the council by a witness whose experience entitles him to speak with exceptional authority on this matter, that the cost of brickwork may in some instances be increased by as much as 33 per cent where extensive cutting away is made necessary by a failure to reach agreement in advance on such matters as those just referred to.”² Another important point stressed by the council is that, under this system, “a large proportion of broken time would be eliminated, and considerable progress at least would be made towards the solution of the problem of insecurity of employment.”³

III. THE TRADE-UNION REPLY

A. Recruitment and Utilisation of Labour. The unions in the building industry have very definite views on the question of apprenticeship. While many of the local and craft schemes regulating conditions of apprenticeship are excellent in themselves, they believe that organisation on a national scale would have distinct advantages. The existing state of affairs is the result of haphazard growth, making proper co-ordination exceedingly difficult. Accordingly, the National Federation of Building Trades Operatives, in conjunction with the Royal Institute of British Architects, has prepared a “scientific scheme to meet the needs of the industry on a planned scale.”

Further, the Federation holds that limitation of entry is essential to the successful working of any scheme of apprenticeship. It is necessary to safeguard both the

¹ Second Interim Report, p. 8.

² *ibid.*, pp. 9 and 10.

³ *ibid.*, p. 12.

standards of craftsmanship and the status of the workers. Many employers appear to be apprehensive that it will result in a shortage of skilled workers, to the detriment of the industry. The unions believe on the contrary, that the uncontrolled admission of boys into the trade has been, and is, a cause of lowering of craft standards. In *The Plumber's Trade and Training*, issued by the Board of Education in 1928, this statement is made: "Statistics recently collected by the Ministry of Labour indicate that the proportion of apprentices to skilled journeymen in the plumbing trade is about one to two, a ratio which is probably too great to ensure a sound system of training or satisfactory after-prospects."¹ This argument, the Federation suggests, can be applied with equal force to other crafts in the industry.

The plastering trade has been singled out for attack with regard to this matter of limitation of entry. It is suggested that there has been a deliberate and unjustified restriction of the supply of skilled labour, and that the higher rate of wages which have been paid to plasterers is evidence of this (p. 20). The plasterers' association strongly contests this view. They point out that a great deal of publicity was given to Sir Ernest Benn's statement in his book, *The Return to Laissez-faire*, that "the 17,420 men who now monopolise the art of plastering are able to demand terms in money, though not in real money, which they might not secure in the free market"; but equal publicity was not given to the fact that Sir Ernest Benn's figures referred, not to 1929, but to 1923. In 1933, according to the Ministry of Labour, there were 29,670 plasterers in the country, an increase of over 12,000 in ten years, and unemployment in the trade amounted to 38.6 per cent. The National Association of Plasterers considers that these figures effectively dispose of the employers' argument, and they contend that a limitation of one apprentice to four journeymen is "generally regarded as reasonable." Further, "it must of course be remembered that one in four only refers to firms employing four plasterers and multiples of four. If a man only employs two plasterers he is still permitted to have one apprentice. Again, if the employer has five journeymen he could have two apprentices. You cannot take hard and fast figures, but this is how it

¹ loc. cit., p. 5.

could work out. Where there is a Local Joint Council these questions are worked out, and they are able to get over the difficulties."

Finally, with regard to wages, it is admitted that, prior to the War, plasterers often received $\frac{1}{2}d.$ an hour more than other craftsmen in the building trade. But this occurred only when they were employed by master plasterers; plasterers working directly under builders received no more than any other craftsmen. The inference appears to be that the master plasterers are specialists. "They know what a man ought to do, and what he can do, and they expect to get that amount of labour out of each man. It is as much through the system as by harder work that the master plasterers can afford to pay more than the builder would pay to a plasterer on his own staff."

A matter intimately connected with apprenticeship is raised by the employers on pp. 20-21. Their complaint is that they are pressed to employ union men, and yet, when they do so, they cannot be certain of obtaining properly qualified craftsmen. Every member of a craft union must receive a skilled man's wage, but there is no guarantee in return that he has had a full and complete training. In reply the unions point out that, until this matter became of importance, the employers always opposed their attempts to take an interest in the quality of the work turned out. The unions have been regarded simply as economic negotiating machines, though they themselves have always had a wider conception of their functions. They are anxious to maintain the standards of their crafts, and their officials take great pains to see that suitable men are supplied for the work in hand.

Nevertheless, it is true that there are men, members of the appropriate unions, employed in the industry to-day who have not served a proper apprenticeship. The unions regret that this should be so, and put the blame on the employers. "The employers, in the main, are responsible for the entire position, because they will attempt to get hold of cheaper labour which is less skilled. . . . In return the unions are forced to organise the men who are employed, for their own protection, and, whilst they attempt wherever it is possible to see that the men have served their apprenticeship, for economic reasons they must organise all the men on the job to safeguard their rate and their general

economic conditions." If the employers would co-operate to administer a proper national apprenticeship scheme, and would undertake to employ only those qualified under the scheme, then the problem of the partially qualified man would disappear.

One of the examples quoted by the employers is that of the brush hand who, after gaining some experience, seeks admission to the union and recognition as a fully skilled man. Undoubtedly this does sometimes happen, but the responsibility lies with the employer. The painters' union does not recognise the existence of a grade known as "brush hands," since, in their opinion, there is a high degree of skill in all painting work, and even the ordinary priming of wood should be done by a properly trained craftsman. So-called brush hands only exist because certain employers have got hold of men with some slight experience of painting, whom they can employ at rates below the agreed scale of wages.

Demarcation.—In general the Federation of Building Trades Operatives agrees with the view of the Building Industry Council of Review as set out on p. 21. The Federation states: "Demarcation disputes very rarely arise in the industry to-day. Any question that does arise is now settled out of hand almost immediately by the machinery that has been established for the prevention of disputes within the industry. Demarcation has not meant the withdrawal of ten men during the last ten years."¹ Officials of individual unions, however, qualify this statement. They agree that there is still a little trouble on account of local conditions and customs, but they are of the opinion that the occasions of dispute are diminishing, and that, given reasonable men on both sides, any question can now be settled without much difficulty.

It is stated (p. 21) that the plumbing trade is a fruitful source of demarcation trouble, more especially with regard to the border-line dividing plumbing and hot-water engineering. The plumbers' union fully admits that, in the past, there have been frequent disputes originating, not in the size of the pipes, but in the purpose for which they were to be used. "Now happily these are about ended."

¹ One employer stated that, about five years ago, all work on a £45,000 contract was stopped for three months because of a dispute between the hot-water engineers and the plumbers.

In 1930, machinery was set up for the settlement of demarcation disputes between themselves and the heating engineers. This machinery provides for the reference of questions in dispute to a Reference Committee consisting of representatives of the master and operative plumbers and of the master and operative heating engineers. The committee has been able to settle all matters referred to it since its inception, and the situation described on p. 21 would not now arise.

The plumbers do not regard the line of division between their union and that of the heating engineers as a matter of principle, but of historical accident. At the same time as the machinery described above was set up, an agreement was reached between the two unions for the formation of "The Plumbing, Heating and Domestic Engineering Confederation," and the plumbers hope ultimately to bring about an amalgamation of all the pipe workers' unions, and to establish a standard rate of wages. When this is accomplished the question of whether the work undertaken belongs to the building or to the civil engineering industry will not have the same importance (p. 28). In any case, the plumbers do not claim to touch the ordinary excavating and labouring work which forms a large proportion of the work done by civil engineers, and they admit that the simple cement jointing which is all that is required for straightforward land drainage can be adequately performed by unskilled labour under the supervision of a highly skilled surveyor. But drainage connected with buildings is a very different matter. For that the scientific training of the plumber is necessary.

In general the attitude of the plumbers' union is that "the whole of the drainage and sanitary work in a building is one complete system. It is work which, in our opinion, is not only highly technical, but very important to the public health and to the efficient operation of the whole of the sanitary fittings in the building." A plumber's training is directed towards giving him a scientific as well as a practical knowledge of the principles involved in the drainage and sanitary arrangements. If he is to do his work efficiently, the standard of his qualifications must be preserved. Industrial agreements as to wages and conditions of labour have been reached on the basis of this standard, and, "if the industry is to preserve these, both

employers and workers must insist that the men within the industry who have been allocated to the work shall do it, and shall be given the appropriate rate of wages for this work. Otherwise the man who could engage the cheapest labour would get the job, and the whole standard of the craft, which employers and workers have jointly set up, would be lowered."

Other criticisms by the employers under this head concern the lack of logical co-ordination between the rules of the various unions (p. 22), and the handicap imposed on the small employer in particular by the disappearance of the handy-man (p. 23). In certain cases it is true that the unions overlap—there are occasions where a bricklayer uses the same tools as the plasterer. "It is difficult to lay down national rules because, if you take, for example, South Wales, slating is done by plasterers. Yet, if you were to tell the London people that a plasterer should be a slater, they would laugh at you." Such matters must be a case for local arrangement, and they can be easily settled by reasonable people. "I never had a demarcation dispute while I was a local secretary," said one official.

The matter of the handy-man comes in a different category. While the industry was developing, he undoubtedly had his place; but, now that operations have become so much more complex and the technical side of the industry is so well developed, he is not required. In practice, a large number of craftsmen will not be employed on a small repair job. "We go to a job at some person's house, and we find that a pipe has got to be taken out which entails breaking down brickwork and plaster. Invariably, if it is a small job, the plumber will do it all, but, if the work is extensive, then the client would want a much better piece of work than could be done by a man who has not had training in bricklaying and plastering. The extent to which one man can undertake the whole job must depend on the nature of the breakdown."

B. Hours and Wages. The chief point of controversy under this head is the question of payment by results (pp. 25-26). A number of employers believe that some such system is the only practicable method of speeding up production, and that it would result in a real increase in the efficiency of the industry. They point out that a flat rate

does nothing to encourage the good workman ; on the contrary, it tends to reduce output to the standard of the slowest man on the job. In certain cases, where individual firms have managed to operate some form of piece work, there is evidence that production has been increased (p. 25). On the other hand, there is a powerful minority among the employers who hold that piece work is no remedy for troubles which are really due to faulty management.

The unions in the building industry hold very strong views on this matter. They are resolutely opposed on principle to any form of piece work, so much so that "we will not even discuss the matter with the employers." In the opinion of the men, the industry is particularly unsuited to such a system of payment, since "it lends itself to skimping of work and irregular construction. Under payment by results, speed is the determining factor rather than quality. It is based on individual effort, whereas building must of necessity be a co-operative effort. The men must work together as a team all the time." The Federation of Building Trades Operatives does not admit the validity of the argument that a flat rate tends to depress the good man, since they hold it to be founded on a false premise. In their reading of the wages agreements the agreed scale constitutes a minimum, not a maximum, and it is open to the employer to pay his experts a higher wage. "In fact, it is common in the industry for the woodworkers who are very skilled on staircase work to get more money than the ordinary woodworkers. . . . The same applies to a highly skilled brickworker who can do rub and gauged work, while, in the case of foremen and leading hands, the employers are paying extra wages in almost every instance." The agreed scale, in fact, should be regarded as a suitable payment for the average worker doing an ordinary day's work, and not as a maximum which cannot be exceeded in any circumstances.

In some sections of the industry, piece work in some form is not unknown. The plasterers have had a good deal of trouble, and have not been able entirely to stamp it out, since they find it impossible to enforce a total prohibition on account of "certain towns, where, if our members were not allowed to do piece work, they would not be able to get employment." Nevertheless, the plasterers' association is strongly opposed to piece work on principle, because

"it leads to scamping, and brings out all that is bad in a man." The following quotation from the association's Monthly Report for July 1923 gives their considered view :

"It is interesting to note what was thought of piece work in the early Victorian period. Benjamin Disraeli, afterwards Lord Beaconsfield, in his novel called *Sybil*, makes one of his characters, who, needless to say, is a trade unionist, express his opinion thus : 'The man who does piece work is guilty of less defensible conduct than a drunkard. The worst passions of our nature are enlisted in support of piece work. Avarice, meanness, cunning, hypocrisy, all excite and feed upon the miserable votary who works by the piece and not by the hour.'

"When Disraeli penned those words in 1845, which express what many feel in 1923, he was moved by a profound knowledge of the conditions of labour, but he had not that personal knowledge which we possess. As everyone knows, he afterwards became the leader and idol of the Conservative Party, and with his later policy few among us would be found to agree. If such a man could condemn piece work, how comes it that there are those in our ranks willing to license and countenance piece work ? "

These arguments with regard to piece work express the gist of the unions' answer to complaints of under-production (p. 26). They do not agree that a man will only give of his best if he is paid by results. "Any employer of labour should know what it is worth to do a given number of yards of plastering or bricklaying or anything else, and he should be prepared to pay a reasonable price for it. He should expect to have a decent job done, and if a man cannot do a decent job, or cannot give a fair amount of output, he can discharge him. We have never taken upon ourselves to say what is a reasonable day's work. We leave that to the employer, and he really ought to know what is a fair amount of work, and he ought to be prepared to pay for it. When an employer asks a man to do piece work, he is just trying to get the work done at the cheapest possible rate." The workman is prepared to give a good day's work for an agreed wage, but there must be mutual respect and trust on both sides. Too many of the

employers' arguments with regard to piece work suggest a reflection on the honesty of the men.

C. General. The whole question of restriction of output is bound up with the problem of the increasing mechanisation of the industry. The unions do not deny that, in some firms, output is lower than it should be, but they do not believe that payment by results is the solution. The views of the Federation on this matter have a great deal in common with those expressed by a certain section of the employers on pp. 27-28. Union opinion was summarised by an official as follows: "The changed circumstances in the industry by the new standards of production have not been universally adopted, and it may be true that in certain instances output is reduced. The output is reduced through the lack of scientific application to the business by the employer, and we find that hand machines are being used in many of the big contractors' works where the mechanised appliances and electrical machines would undoubtedly reduce the costs. As a union we do not object to the introduction of mechanical appliances. Indeed, the union has made more inquiries in reference to the uses to which machines can be applied in the industry than the employers have done. The policy of the Federation has been to make a complete examination of the industry, and a great deal of data has been collected in reference to the machine unit."

Given a progressive employer with a proper appreciation of the possibilities of the new methods, the English builder can hold his own, both as regards speed of output and reliability of work, with any other in the world. In illustration, the Federation instanced the case of Thames House, "which would have taken four years to build under conditions existing a few years ago. . . . This job was completed practically without any overtime, the speed of erection being due to far-sighted planning in the first place, general co-ordination, and the use of the most up-to-date equipment." Another instance is the Piccadilly Underground Railway Station, "one of the engineering feats of the century, which was done in record time with the assistance of the most modern mechanical devices."

Nevertheless, while increased mechanisation is inevitable and necessary, it is raising large problems which

have yet to be properly faced. "The scientific distribution of man-power in industry is becoming a paramount issue of modern times." The unions are troubled by the lack of unity and common policy in their industry. They point out that it is very difficult to have any real control, or considered and far-sighted policy, in an industry where there are 55,000 employers, of whom about 16,000 employ some 70 per cent of the total personnel. The industry covers many trades, and so far there has been no co-ordinating body to stress the basic unity which should override all sectional interests. The unions welcome the appearance of the Building Industry Council of Review, in whose formation they have played a large part, and they hope that the council may provide a focus where all can contribute their share towards the progressive development of the industry in which they are fellow members.

IV. SUMMARY

The evidence collected during the course of this investigation does not support the conclusion that the efficient development of the larger concerns in the building industry is very severely hampered by trade-union restrictions. The employers, when stating their case, conveyed to the investigators the impression that, while they took exception to certain practices, the handicaps which these imposed could be overcome without serious loss of efficiency. Where operations are on a large scale the employer is apparently able to organise his labour supply without encountering major difficulties. Trade-union rules and practices bear more heavily on the smaller employer.

The employers' arguments with regard to restriction of entry to the skilled crafts, and the qualifications of their members, are fairly effectively countered by the unions. No definite proof of shortage of skilled workers in any craft has been provided, while responsibility for the existence of workmen who are entitled to, but do not deserve, a skilled wage must be divided between the unions and the employers. They will remain a problem so long as, on the one hand, they are given union status which they have not earned, and, on the other, the agreed standard wage rates are not uniformly observed.

Official opinion on both sides considers that difficulties

arising from lines of demarcation are rapidly disappearing. Employers and unions have co-operated to provide machinery whereby such disputes can be amicably settled, and actual stoppages are now rare. Nevertheless, different trades are still liable to claim the same piece of work, and, in addition, the craftsman views with apprehension the advance of the semi-skilled worker. It is significant that one of the newer activities of the trade, the construction of wooden moulds for concrete work, is providing occasions for conflict, both between craft unions and between the skilled, the semi-skilled, and the unskilled workman. Until the various trade unions can co-ordinate their rules to prevent overlapping claims, they must be held responsible for allowing opportunities for delay and friction.

The outstanding issue in the industry concerns the merits and demerits of piece work. The unions are opposed on principle to piece work in any form, but many employers, though by no means all, believe that its adoption would lead to an increase in output. There is evidence that output, in many cases, is lower than it was prior to 1914, and it is stated that in individual instances where piece work has been adopted an increase in production has resulted. The unions do not deny that piece work may raise output, but they are convinced that greater speed can only be achieved at the expense of the quality of the work turned out. Building, they hold, depends essentially upon team work, and to foster the spirit of individual competition is to imperil standards of craftsmanship.

The unions contend that the proper method to secure improvement in output is by reforms in organisation and management. Point is added to their arguments by the fact that a number of employers are acutely critical of the methods of management of the average firm in the industry. The need for a careful and detailed plan of operations before work is started on any large building contract would appear to be obvious, and it is disturbing to find that it is not always regarded as a matter of course.

Building is a sheltered industry, engaged in supplying the nation with an essential commodity. If the trade as a whole chooses to accept restrictive practices, it can pass on to the consumer the extra cost which these impose. The evidence suggests that there are at least two points wherein existing conditions could be reformed to the benefit of the

public. No one attempts to justify demarcation disputes, and machinery for their settlement, however well devised, is directed towards limiting the consequences rather than removing the cause. Proper co-ordination between the unions and the evolution of an agreed policy would cut at the root of the problem.

Secondly, the question of output demands serious consideration. Whatever the verdict may be as to the desirability or otherwise of adopting some form of payment by results, the evidence that output was greater prior to 1914 stands unchallenged. It is not suggested that pre-War standards of craftsmanship were inferior to those of to-day, and therefore the contention of the unions that faulty organisation is responsible cannot be accepted as supplying the whole explanation. It should be possible to improve output, but the arguments on this point would carry greater weight if employers in general could prove that they were making use of the most efficient and up-to-date methods of management.

THE COAL INDUSTRY

I. INTRODUCTION

COAL HAS BEEN MINED in England for many centuries, but its peculiar importance as a basic industry dates from the beginnings of the Industrial Revolution. Collieries are to be found in many parts of the country, and the coal-fields vary greatly in size. The largest are the South Wales, Durham, and Yorkshire coal-fields. In these three areas a large number of towns and villages are almost entirely dependent on the coal-mining industry, a fact which accentuates the sense of isolation from workers in other industries which is the natural result of the conditions in which the miner works.

According to the Ministry of Labour returns, there were, in October 1934, 981,520 insured persons registered as being, or having last been, in the employ of colliery owners ; of whom 28·6 per cent were wholly or temporarily unemployed. It is estimated that these figures represent a population of over two and a half million whose livelihood is dependent on the mines. The average number of days worked per week was 4·58.

Before the War, British coal was outstanding in the markets of the world. The total output in this country in 1913 was 287,430,473 tons, of which 98,338,104 tons were exported or shipped for bunkers by ships engaged in overseas trade. In 1924, the total output had fallen to 260 million tons, but, as the world's output had also fallen, Great Britain still retained 52·2 per cent of the world's export trade.¹ Since then, however, the position has steadily deteriorated. Coal-owners, in many cases, have proved unable to reduce their costs proportionately to the fall in prices, and the export trade has been hampered by restrictions on imports imposed by foreign countries. There has been a very slight improvement in 1933, but the position of the industry remains serious. In October of

¹ *Ency. Brit.*, 14th edition, "Coal Mining."

that year the total output of coal in Great Britain for the four weeks ending October 28th was 17,000,900 tons, and the exports, including that shipped for the use of steamers engaged in foreign trade, amounted to 5,154,600 tons.¹

The organisation of the employers in the industry is concentrated on the district associations. There is a central body—the Mining Association of Great Britain—but it does not concern itself with the internal working conditions of the industry. “The Mining Association as a central body does not deal with labour matters, and carefully avoids all questions of wages because wages are under district agreements.” There are some twenty-two district associations in Great Britain, representing the principal areas where coal is mined. Each has its own arrangement for negotiating with the men. In most cases there is a signed agreement, setting up machinery for negotiation and conciliation, but in a few districts, notably South Yorkshire, employers and workers have for many years carried through their business informally and without elaborate procedure.²

The largest district association of employers is the South Wales Coal Owners' Association, and its Conciliation Board agreement may be taken as representative. The board, which was set up by agreement in February 1931, consists of twenty-nine owners' representatives and twenty-nine representatives of the workmen, together with an independent chairman appointed from outside the industry. The agreement sets out an elaborate method for calculating the piece rates to be paid in the area, and provides for a three-monthly audit by independent accountants for the purpose of finding the percentage payable on the standard rates. Since 1921 there has been provision for the payment of a minimum percentage, but any increase on this depends on the relation between the selling price and the costs of production other than wages,³ and the latter therefore reflect in some degree the state of the industry at any given period. In addition, the agreement deals with such matters as overtime, subsistence allowances, etc., and provides machinery for the avoidance of disputes.

¹ *Ministry of Labour Gazette*, November 1933, at p. 405.

² Negotiating machinery exists and is operated as between the Yorkshire coal owners and the Yorkshire Mineworkers' Association.

³ Conciliation Board Agreement for the Coal Trade of Monmouthshire and South Wales, s. 14.

Every cause for complaint must first be investigated locally ; failing agreement, it is then referred to a sub-committee of the board known as " The Joint Standing Disputes Committee," and it is only in the event of failure to find a solution by this committee that either side is at liberty to tender notices to terminate existing contracts.

The range of this agreement and its main principles are common to most district agreements, though the methods of procedure show some variation. It is a cardinal point in the employers' policy that wages should be settled on a district rather than a national basis, and this is reflected in the working conditions established under each agreement. The employers contend that the conditions in the pits, the quantity of small coal, and other factors vary so much from area to area that a national standard wage would be both unjust and impracticable. This insistence on the importance of the district as a unit is apparent throughout the employers' organisations.

On the men's side, on the contrary, the bias is strongly towards centralisation. While it is true that their organisation is founded on local units, and built from the bottom upwards, the end in view has been to bring about unity among the workers in and about the mine. During the past hundred years various forms of organisation have been tried, and in 1888 the Miners' Federation of Great Britain was formed. To-day the Federation is recognised as having authority to speak for the workers generally in the industry. It consists of a number of unions and associations, some of which are registered separately. These constituent associations are in no way bound to observe the decisions of the Federation. They can act on their own initiative in all matters, including strike action, but the occasions on which they have made use of their powers in recent years have not been numerous. A competent authority, writing in 1918, came to the conclusion that " the most strongly organised industry in the country to-day is coal-mining."¹ Though this statement might be questioned to-day, it remains true that the men in the industry are powerfully organised, and that much of their strength comes from the leadership provided by the Miners' Federation.

The Federation claims affiliation in respect of 554,878

¹ G. D. H. Cole, *An Introduction to Trade Unionism*, at p. 8.

workers, rather over half of the insured workers registered as belonging to the industry. Membership of the constituent associations is open to all engaged in work at the mine. The Federation is most strongly represented among the underground workers, though in most districts it is also powerful among the unskilled workers at the pit head. The organisation is based on the lodge, which comprises the union membership at a particular mine. Lodges are grouped together in district associations which may cover a county or a larger area. The district association is governed by a council of delegates from the lodges, and important questions are often referred back to lodge meetings so that the delegates may obtain direct instructions from the members. Similarly the central executive committee of the Federation is controlled by a conference of representatives from the associations which meets annually, and is in addition summoned when there are important issues to decide. In this way local organisation has been combined with a central authority sufficiently strong and representative to speak for the whole of the workers on questions of national import.¹ Its chief weakness lies in the lack of a secure central finance fund.

The craftsmen engaged in the industry are eligible for membership of the associations, but for the most part they prefer to join the various craft unions which cater for their trades. Some of the latter are affiliated to the Federation, others take up a definitely hostile attitude. The standpoint adopted seems to depend largely on the traditions of the district—in Northumberland and in South Wales, for instance, miners and craftsmen have worked amicably together for many years, but this is by no means true of all areas. The chief craft organisations which are confined to the industry are the National Federation of Colliery Deputies', Examiners', and Firemen's Associations, the National Federation of Colliery Enginemen and Boilermen, and the National Federation of Colliery Mechanics. In addition, such general craft societies as the Amalgamated Engineering Union and the Electrical Trades Union draw some of their members from the mining industry. Another

¹ One exception to this statement should be noted. Wage agreements in Nottinghamshire and Derbyshire are negotiated with George Spencer's Industrial Union, which is not affiliated to the Miners' Federation of Great Britain.

outside organisation, the Transport and General Workers' Union, has a substantial membership among the unskilled surface workers, particularly in South Yorkshire.

The coal-mining industry has several characteristics which deserve mention. The miners in most areas live in an isolated community whose whole interest is centred in the pit. Mining is an arduous and often a dangerous occupation, and it is not surprising that the workers have become both independent and reserved. In their relations with the outer world, and particularly with the employers, this reserve is intensified by suspicion, a legacy of the days when men, women and children were bound for life to the mines in conditions of practical slavery. Further it must be remembered that coal-mining was one of the last of the important industries to set about the mechanisation of its productive processes, so that, until recently, the strength and dexterity of the worker was a decisive factor. The position is now changing, and, according to the latest official figures,¹ coal-cutting machines now produce 69 per cent of the Scottish output and 38 per cent of the output from the United Kingdom. The change must eventually involve the disappearance of the skilled hewer as an important grade of labour, and the growth of a class of machine workers. In some districts the number of men displaced by coal-cutters and conveyors is already creating a serious problem, which is likely to become more acute.

Finally, because of its peculiar importance as a key industry, coal-mining has always been susceptible to Government interference and control. Licences represent an early attempt to impose some measure of royal authority on the industry, while in recent times the exigencies of the War led to Government control of the mines. Since then, though the mines have reverted to private control, the Government of the day has found it necessary to interfere on a number of occasions, and two Royal Commissions have inquired into the state of the industry. The Miners' Federation is strongly in favour of political action to secure reform, and with each intervention by the State the question of nationalisation is raised. Successive Governments have tried different methods of bringing pressure to bear on the industry, and it seems likely that intervention by the State, in some form or another, will continue.

¹ Report of H.M. Chief Inspector of Mines, 1933.

II. THE EMPLOYERS' POINT OF VIEW

Coal-mining is concentrated in a number of areas ranging from Scotland to South Wales and Kent, and conditions vary considerably according to the traditions of the locality and the nature of the mines. Further, there are over a thousand separate colliery undertakings in Great Britain, owning some 2,500 mines.¹ These differ very markedly both in organisation and in output capacity, and the views of the owners are to some extent coloured by the relative prosperity or depression of the particular section of the trade in which they are interested. Again, in an industry where memories are long, events of the past exercise a potent influence, and, in some cases, relations between masters and men still suffer from suspicions engendered many years ago. This diversity makes it dangerous to generalise too freely regarding conditions throughout the industry. There is, however, sufficient evidence drawn from a number of sources to justify some general observations.

Employers in most districts are agreed that there is very little that can be regarded as restrictive action by the trade unions in the industry to-day. Reference is continually made to the troubles of the past, when stoppages were constant, and a trifling matter might precipitate a crisis. But it is admitted that the position is now very different. It is alleged that : " The workmen generally, and the trade unions sometimes, are suspicious of any desire by employers to introduce modern methods or new customs. They usually regard such innovations as being solely for the benefit of the employers, whereas in many cases they are for mutual benefit." Nevertheless, in the detailed evidence there are very few examples of practices which seriously hamper the trade. Indeed, one employer states : " I have discussed the whole question of trade-union restrictions with our technical men, and they tell me definitely that we are not hindered by trade-union restrictions."

While the comparative absence of restrictions is generally admitted, there is considerable divergence of opinion as to

¹ In 1925, 93 per cent of the total output was raised by 467 undertakings (*Samuel Commission Report*, p. 47). Since then amalgamations have been carried through involving 361 pits normally employing 228,010 workpeople. (See *Fifth Report of the Mines Department under the Mining Industry Act, 1926.*)

the reasons for the change of attitude during recent years. Some employers believe that the explanation is to be found in the depression which has affected every section of the community, and they fear that a revival in trade will be followed by a revival of the practices which caused so much trouble in the past. Another view is that actual restrictive practices are not so important as the habit of mind of which they are evidence. "It is not so much the material as the moral restrictions of which we complain." The unions, it is contended, are governed by political considerations, and will "sacrifice the industry for the sake of preconceived economic fallacies." In marked contrast stands the opinion of a small section of the employers who hold that a large number of so-called restrictions are really due to faulty and inefficient management. In one case a firm which had bought up a number of bankrupt concerns was able to point to the success of these businesses under new management in proof of their argument.

There are two other general points on which there is a consensus of agreement among the employers. They find that the traditional conservatism of the miner makes it hard to obtain concessions with regard to long-established local customs. For instance, there is in the South Wales coal-field an arrangement known as the "bonus term" which does not exist in any other part of the country. The arrangement is that night-shift men, who can only work five afternoons or nights, shall be paid a bonus to put them on an equality with the men who can work six morning-shifts. The South Wales miners insist on the retention of this "bonus term," despite the fact that "it raises our costs of production by nearly 3*d.* a ton." Again, in some districts, miners receive special allowances of household coal at a cost which is often far below the price at which coal is selling at the pit head. According to the statistical summaries issued by the Mines Department the value of allowances in kind varies from 1*s.* 2*d.* per shift in Durham to less than $\frac{1}{2}$ *d.* per shift in Scotland and Lancashire. Customs such as these are, in effect, extra charges on the industry, and in a large concern they may amount to a heavy annual burden.

Finally, a number of employers are inclined to attribute many of their difficulties to the consequences of national

control during the War, and of Government intervention since. During the War, concessions were made without regard to their possible effects in the future, and owners feel that the Government, having got what it wanted for the moment, left others to bear the brunt of the trouble which ultimately arose from its hasty and often ill-considered actions. Further, national control has been followed by national legislation on such subjects as hours of work and overtime. Many employers contend that this legislation has had the effect of restricting output and impairing efficiency, since it ignores the range and diversity of local conditions. In those districts, for instance, where machine work is done on a cycle basis running through three shifts, a small but unforeseen difficulty may upset the whole arrangement. This would not be serious if it could be put right by the men, during whose shift it occurred, working overtime; but Government regulations are said to be too rigid, and not to allow that measure of flexibility which is necessary in any complex organisation. The Miners' Federation has been encouraged to demand a national wages settlement, and to press for other forms of Government intervention which the employers regard as undesirable and dangerous. The emphasis given to the wages question is, in the opinion of the employers, due to the determination of the Miners' Federation to bring back nationalisation as a political issue. They are pre-occupied with this matter to the exclusion of other methods of improvement and reform.

These general considerations express the substance of the employers' view with regard to restrictive practices in the industry to-day. In the following pages, working conditions are considered in more detail, and under separate heads, in order to show how far employers would like to alter existing arrangements. The evidence put forward does not add very greatly to the arguments already set out; generally speaking it emphasises the absence of serious restrictions, and confirms the statements made as to the good relations existing between owners and men in certain districts.

A. Recruitment and Utilisation of Labour. Recruitment to the coal-mining industry does not present any great problems. Labour at the mines includes a number

of occupations, but the great majority of the workers are employed underground.¹ Boys are taken on to do odd jobs and light work, and gradually, under careful supervision, learn to qualify for more responsible posts. No one is allowed to work by himself at the coal-face until he has had at least two years' experience under the supervision of a qualified hewer. Apprenticeship proper is confined to maintenance workers and mining engineers, and is not a subject of negotiation between the employers and the unions.

There is no question, therefore, of limitation of entry to the trade in the interests of a particular craft, and the employers generally do not appear to experience any difficulty in obtaining as many recruits as they require.² The owners in one area, however—South Yorkshire—do suggest that there is a shortage of skilled workers, which is "due to the fact that the rates of wages of the unskilled men are relatively high compared with the wages paid to the skilled men." Formerly, helpers who were learning the job at the coal-face were paid on a time rate, but since the War a pooling system has come into operation and there is not the same incentive as before to become highly qualified.

Both promotion and dismissal, other things being equal, generally depend on seniority, and there is no suggestion that this causes any difficulty. From South Wales comes some evidence of trouble with non-union men, and at one colliery men who could not produce cards of membership of the lodge were waylaid and prevented from getting their lamps out. It is admitted, however, that this action was caused by an extreme section of the men who are Communists rather than trade unionists, and who have been disowned by the Federation. It is also reported that there was recently a threat of strike action in Northumberland on this question.

Generally speaking, employers in the coal-mining industry do not complain that the distribution of labour is seriously hampered by lines of demarcation. In some districts it is alleged that bye-workers and stone-workers often object to being sent to get coal, and that skilled men

¹ It was estimated, with regard to the South Wales coal-field in 1915, that labour was distributed as to underground workers 84 per cent, and as to surface workers 16 per cent (*Ency. Brit.*, loc. cit.).

² In one district in Northumberland a serious shortage of boys was reported.

will not undertake labouring jobs owing to the difference in the rates of wages. Other employers state that they have no difficulty in transferring men from one class of work to another, even though it may mean that earnings are adversely affected. Each district has its own regulations regarding the rates of pay that shall apply in such circumstances, but the general principle seems to be that the rate shall be that of the job in question.

A labour problem which used to cause trouble in the mines was the question of absenteeism, from which this industry suffered more than any other. When a man had earned what he considered a sufficient sum for his weekly needs, he would not deem it incumbent upon him to turn up for the remaining shifts, a practice which added to the difficulties of organisation. Since short time has become prevalent, however, there has been a marked diminution in the number of absentees, though, in the opinion of the employers, there is still room for improvement. It is suggested that the payment of unemployment benefit has bearings on this question.

B. Hours and Wages. As has already been mentioned, the hours of work in the pits are fixed by statute, and it is only in case of accidents that the $7\frac{1}{2}$ -hour day underground can be exceeded. Overtime for other workers is regulated by district or local agreements. In Scotland, for example, week-end work is paid at the rate of time and a quarter, but other overtime is paid at ordinary time rates. Some owners feel that the rates are unduly high, particularly in the case of continuous shift men, such as winding engine-men and firemen. These men take home seven days' wages in any case, and it is considered unreasonable that they should have extra pay for what is often very light Sunday work.

Owners in a number of districts have another grievance with regard to overtime. They find that the Miners' Federation sometimes objects, on the ground that, if there is extra work to be done, additional men should be engaged to do it. A recent example was quoted from South Wales where men engaged on repair work were forbidden by the union to work overtime, and the management was forced to engage other men, though the amount of work remaining to be done was relatively small. While it is reasonable

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to suggest that overtime work should be the exception rather than the rule, the employers concerned feel that there should be some give and take in accordance with circumstances. From the point of view of costs, it is cheaper, if there is not a great deal to do, to keep a man on for a couple of hours and pay him overtime, than to take another man on for a shift and have to pay him a full day's wage.¹ However, it is admitted that the occasions of interference by the Federation are rare.

In most of the strictly mining occupations some form of piece work is in operation. Each district has its own method of settling the price lists, and the arrangements may vary from colliery to colliery within any given area. The methods of calculation are often complicated, and based on lists which were drawn up twenty or thirty years ago. Employers generally comment on the difficulties which attend any attempt at revision, and state that the men are slow to admit that alterations ought to be made to meet changed conditions of working. It would appear from the evidence that a great deal depends on the attitude of the men's leaders in any particular district, but, even where the leaders see the need for change, there is a strong sentiment in favour of established custom to be combated.

One of the few real restrictive practices of which the employers complain arises in connection with the fixing of new price lists. When a new seam is opened it is common to find that the men go slow, and deliberately restrict output during the period while prices are under consideration. Evidence of this is widespread, though the extent to which restriction is carried varies considerably. Many employers admit that it is a natural reaction, the probable duration and effects of which can be foreseen, and they add that, once the critical period is passed, output quickly reaches normal again. Two examples, however, were cited, both from the same district, of collieries which were forced to close down because the union leaders would not agree to a reasonable price list, and enforced their view by holding up production to a grave extent. These instances, though, cannot be regarded as typical.

C. General Conditions. Apart from troubles with regard to price lists, as described in the preceding paragraph,

¹ This applies to time workers—not to men on piece.

the employers do not complain that the unions advocate any deliberate policy of restriction of output. They are of the opinion, however, that in some districts the men themselves seriously curtail production. "They agree among themselves what the 'stint' shall be, and anyone who exceeds the agreed limit is subjected to severe pressure to bring him into line." It was stated with regard to a colliery in the north of England that "the men decline to allow more than twelve men to work on a conveyor face, which imposes a severe restriction. In many collieries in England and on the Continent over 500 tons per shift are filled out from a pair of conveyor faces." Generally speaking, though, such restrictive practices exist only in districts which have in the past been noted for favourable mining conditions or for high quality coal. In those districts where the continued existence of the colliery depends on a satisfactory output per man, employers speak highly of the capacity for hard work shown by the average miner.

Again, with regard to the use of machinery, it is stated that the Miners' Federation is extremely reasonable, and accepts the principle that increasing mechanisation is inevitable. In some districts, however, the men are said to show a marked antipathy to machine mining. Such an attitude is natural having regard to the displacement of labour which must result, and employers in some collieries have postponed the introduction of new machinery rather than increase unemployment. The question of the manning of the machines is said to raise no difficulties. In some places the matter is "left entirely in the hands of the management," in others it is "settled by mutual arrangement between masters and men," but, whatever method is adopted, the result seems to be equally satisfactory.

III. THE TRADE-UNION REPLY

The trade unions in the coal industry are anxious to do all that they can to assist to restore the industry to its former prosperity. Over 300,000 miners are unemployed, and every possible effort must be made to bring about such improvement as will permit of the reabsorption of these men. In such circumstances, practices tending to hamper efficient development would be deplorable, and the employers have admitted that anything of the kind is rare.

They have, however, raised a few points, but the unions believe that they can provide an adequate reply in every case.

On the general question of local customs which are said to impose unjustifiable restrictions (p. 46), the unions' answer is that these remain because the employers will insist on treating the different coal-fields as autonomous. The custom of paying for six shifts when only five are worked, for example, only obtains in certain districts. It is an anomaly, and the way to dispose of anomalies is to have a national regulation of wages. The Miners' Federation has argued for years that wages should be determined on a national and not a district basis, and the employers have always replied that this is impossible because of the great differences in local conditions. It is surely illogical to oppose a national arrangement and at the same time to complain of local customs.

Another custom to which the employers refer in support of their argument is that by which miners obtain coal at the pit head at specially cheap rates. This has been a recognised practice for many years, and it has been taken into account, both in regard to the general wage level and when fixing price lists. Further, because of the nature of his occupation, the consumption of coal in a miner's home is far greater than in that of any other worker. "The three-shift system necessitates a fire in the early morning for the day-shift men, and then again late at night for the afternoon-shift coming home. The men arrive home with wet clothes, and in the average miner's home 'every day is washing day.'" The unions hold that there is every reason why the miner should have cheap coal, but he does not always get it. "After the 1926 stoppage in Yorkshire in particular the employers complained of the cost of this concession or privilege, and asked for some form of payment. Owing to our reduced power of resistance, we had to agree to a provision that a sum equal to $\frac{1}{2}$ per cent of wages on base rates should be taken from proceeds before any calculation was made as to the proportion allotted to wages. This $\frac{1}{2}$ per cent is in addition to whatever payments were made for coal prior to 1926. We in Yorkshire, therefore, claim that we are paying for our coal. In terms of cash an average of £65,000 per year has been deducted from proceeds in respect of miners' coal, or a total of nearly half a million pounds from 1927 to 1933 inclusive."

A. Recruitment and Utilisation of Labour. The Miners' Federation is surprised that the employers should complain of a shortage of skilled labour (p. 48). Excellent facilities for technical education are now provided through the Miners' Welfare Fund, and, if these are not taken advantage of to the extent to which they might be, it is because the openings for the man who takes such a training are so few.

With regard to skilled hewers, responsible officials of the Yorkshire Miners' Federation would admit that there are signs of shortage (p. 48). They believe that this is, in the main, the result of the introduction of machine mining. "The tendency of the past few years has been to under-cut the coal by machinery, and then to look out for young men physically strong, rather than skilled, whose work is confined mainly to filling coal, rather than getting the coal. . . . We find greater difficulty in getting employment for a skilled coal-hewer than for young men who are physically strong, between the ages of eighteen and thirty. There is no incentive for a man to become a skilled hewer to-day. All the men have to do is to be trained to 'keep the shovel hot.' "

B. Hours and Wages. The employers raise the question of overtime, and state that there are occasions when the Miners' Federation is unreasonable in refusing to agree to it (pp. 49-50). The Federation points out that the law is that men may be detained after the normal shift to deal with an emergency which has arisen owing to unforeseen circumstances. When they object, it is because "the employers are interpreting this clause too broadly." "They set out the length of face to be cut and filled in a shift, which can only be done if tubs are supplied regularly, if timber of the proper size is always available, and the machinery is kept running during the whole shift. A breakdown in any of these respects is used by the employers as a justification for keeping men overtime. There are pits in Nottingham working 8½ hours every day, and the Mines Department is now going to undertake a very thorough investigation into this question. The section of the Act relating to overtime was intended for an entirely unforeseen emergency, and not an artificial one."

Another point which may be considered in relation to

hours is the question of absenteeism (p. 49). The men's representatives agree that this occurs with some frequency when conditions are normal, and they look upon it as inevitable as things stand. "I do not think," remarked one official, "that it is physically possible for men to work six days a week in the coal-mines under existing conditions. The intensification of modern mining practice takes so much out of a man that six days regularly would be more than he could stand. Given a five-day week, absenteeism would be reduced to an absolute minimum."

With regard to wages, the employers take occasion to criticise the ca'canny attitude adopted by the men when a new price list is being fixed (p. 50). The men's reply is that the employers themselves are responsible, since they do not take a test under fair conditions. "It is the practice of the employers to select a short length of new face, to draft the best men on to this new experimental face, and to have everything ideal for securing a maximum output. The tendency is to take that output as a standard for the whole pit, without regard to the fact that, as the pit progresses, work will be further from the pit bottom, and rough defects will be encountered." It is not reasonable to expect a man to do other than go slow when he knows that his output under almost ideal conditions will be taken as the datum-line for future payments.

The Federation suggests that a better method of making a new list would be to work, not one, but several faces on a day-wage system, "in order that both sides might acquire reasonable experience of the conditions likely to be encountered." They would be prepared at any time to substitute day for piece rates as the normal method of payment, though they do not believe that the change would be beneficial to the industry.

C. General Considerations. Several employers criticise the political activities of the Miners' Federation (p. 47), holding that these create a habit of mind which is an obstacle to efficient progress. The men, they say, are encouraged to believe that certain changes can be achieved through political action, and consequently they are obstinate in refusing to give serious consideration to other suggestions, which might be carried through by different means.

The Federation, on the other hand, hold that it is essential that they should take part in politics. The coal industry is regulated by statute to a far greater extent than any other. Hours of work underground, ventilation, safety precautions, and kindred topics have all been the subject of legislation, and the Federation feels that it is essential that the views of the men should be expressed when matters of such vital importance to them are under discussion. "We have been compelled to influence mining legislation in the interests of the workpeople. We think that it can be safely said that the original Eight Hours Act of 1908, the Minimum Wage Act of 1912, and improved safety legislation, have been the direct result of political activity carried on by the Miners' Federation, and no one can deny that they have been justified by experience."

The Federation regrets that the employers do not appear to realise the help which the men could give them in regard to improving methods of production. "I feel quite sure," remarked one official, "that helpful suggestions could be made from time to time, by working miners, as to the system of timbering, methods of haulage, rough surfaces, and other such things, if only the men were taken into confidence and given facilities for making suggestions. Immediately there is a disaster, volunteers are called for among the men, and there is never any lack of response, whatever the danger may be. Frequently in cases of accident, steps are taken by the men themselves before a responsible official reaches the scene." The Federation feels very strongly that the workmen can make most valuable suggestions, but they are not called into consultation—indeed, they are often virtually told that their ideas are not wanted. "Their job is to get coal, and to do as they are told."

The Federation realises that a mistake was made when they did not immediately accept the Government's offer to set up joint pit committees. Though the original refusal to accept the suggestion was withdrawn very speedily the owners would not then agree. In the opinion of the Federation, the institution of such committees would materially promote the efficient development of the industry, and should be enforced by the Government. The industry is in need of a thorough overhaul, and the Miners' Federation has repeatedly stated the reforms

which it believes to be necessary. Recovery has not resulted from the many sacrifices the workers have been forced to make, and will not be achieved without, as a preliminary, national co-ordination in production and marketing.

IV. SUMMARY

Employers in the coal industry are clear that they are not at present seriously hampered by restrictions which can be ascribed to trade-union action or policy. The few points which they raise are adequately answered by the men's representatives; indeed, the investigators were considerably impressed by the frankness with which the latter discussed the whole issue, and the cogency of the arguments which they advanced. As compared with that of the employers, the union point of view was presented with greater clarity and co-ordination, and it is perhaps not unreasonable to regard this as in some measure the result of the different forms of organisation adopted by the two sides. Certainly, with regard to the chief ground of complaint put forward by the employers—local customs which raise costs of production—it is difficult to avoid the conclusion that the persistence of these is a consequence of adherence to district rather than national negotiations.

THE COTTON INDUSTRY

I. INTRODUCTION

THE ENGLISH COTTON INDUSTRY is concentrated in Lancashire, and in the adjoining parts of the counties of Yorkshire, Cheshire, and Derbyshire. The industry is divided into three principal sections: spinning, weaving (or cotton manufacturing), and finishing. In addition there are the merchants, who, more often than not, intervene between the processes of manufacture, as well as acting as wholesale dealers in the finished product. Yarn may be bought from the spinners and then either sold to the weavers or handed to them on commission, while the greater part of the work in the finishing section is done on commission for the merchants.

In normal times it is estimated that the cotton industry employs approximately 10 per cent of the male working population in Lancashire, and 33 per cent of the female. According to the Ministry of Labour returns, there were in October 1934, 467,440 insured workers registered as being, or having last been, in the employ of spinning and weaving firms in the industry; of whom 169,920 were men and 297,520 women. At the same date the analogous figures for the finishing trades¹ were 109,530; 78,300 men and 31,230 women. In the weaving and spinning sections 25.0 per cent of the men and 22.4 per cent of the women were wholly or temporarily unemployed, while the proportions in the finishing section were 23.4 per cent and 16.7 per cent respectively.

The division of the industry into sections is characteristic of its whole organisation. Most firms specialise in one aspect of manufacture only. In 1925 the Manchester Chamber of Commerce estimated that, out of 1,654 firms engaged in cotton spinning and manufacturing, 37 per cent were spinners only, 50 per cent weavers only, and 13

¹ "Textile Bleaching, Printing, Dyeing, etc.," *Ministry of Labour Gazette*, November 1934, at p. 408.

per cent engaged in both processes. Similarly, in the finishing trades, few firms undertake more than one branch of the work, and a firm which spins, weaves, and finishes its own cloth is very exceptional. There is a tendency for manufacturers engaged on the same kind of work to congregate in one district, thus emphasising the bias towards sectional organisation.

The spinning section of the industry is concentrated in two groups in the south-east of Lancashire, the larger centred round Oldham and the smaller round Bolton. The latter district produces nearly all the fine yarn made from Egyptian cotton, and the Oldham district the coarser counts of yarn made from American cotton. There are between six and seven hundred firms of very varying sizes engaged in spinning, but the tendency of late years has been towards the formation of larger units.

The chief organisation on the employers' side is the Federation of Master Cotton Spinners' Associations Ltd., which is a federation of fourteen local associations. Through these local associations the federation comprises 650 firms owning forty-four million spinning spindles—that is, about 80 per cent of the total spindles in Great Britain. In normal times approximately 200,000 workpeople are employed in the mills owned by members of the federation.¹ Though the federation is for spinners, some 10 per cent of the members are engaged in weaving.

Firms which specialise in weaving are also grouped in areas. The Nelson and Colne districts specialise in the weaving of fine cloths, Colne in particular from dyed yarns, whilst the Burnley and Blackburn areas are concerned in the weaving of coarse goods, such as shirtings and dhooties, for the Indian and Far Eastern market. Though this localised distribution is in no way fixed and immutable, it does serve to connect each town with a particular type of product, with the result that a falling off in the demand, say from India, will gravely affect Blackburn while leaving Nelson comparatively untouched.

Employers in the weaving section are organised in sixteen local associations representing 560 firms. These associations are federated in the Cotton Spinners' and

¹ Statement submitted by the Federation of Master Cotton Spinners' Associations Ltd. to the Committee of Civil Research appointed by the Government to inquire into the cotton industry, November 1929, at p. 2.

Manufacturers' Association which represents 80 per cent of the weaving firms in the industry. The federation also includes some spinning firms, amounting to perhaps 10 per cent of the total membership.

In the finishing section of the trade, where the work is of three kinds—dyeing, bleaching, and pattern printing—the employers are also organised in groups. In dyeing there is the Employers' Federation of Dyers and Finishers in the Lancashire area, while the Bradford Dyers' Association Ltd., an amalgamation of a large number of firms, is the most important organisation in Yorkshire. The bleaching trade is covered by the Employers' Federation of Bleachers, and the calico printing employers are served by the Federation of Calico Printers. There is also the Federation of Cotton Yarn Bleachers, Dyers and Sizers. Generally speaking, the firms in these federations confine their attention to finishing work, though one or two have their own spinning and weaving mills. The federations named have a co-ordinating organisation, the Allied Association of Bleachers, Dyers, Printers and Finishers.

The bias towards sectional organisation, which is characteristic of the employers, is also apparent among the workers. Not only are the three sections—the spinners, the weavers, and those engaged in the finishing trades—served by separate unions, but within each division there are a number of associations catering for the same class of workers. In December 1932, there were 171 unions in the cotton industry, with a total membership of 318,884—that is, 63·8 per cent of the insured workers.¹ The existence of so many unions is largely explained by the organic growth of the industry. In almost every town and village textile organisations exist. They are autonomous units, linked together in amalgamations, and subsequently on the manufacturing side in the Northern Counties Textile Trades Federation; while for the whole industry there is the United Textile Factory Workers' Association, which deals mainly with legislative and political

¹ *Ministry of Labour Gazette*, October 1933, at p. 383. It should be observed that "insured workers" includes everyone—juveniles, clerks, mechanics, etc.—employed by the firms, and therefore the workers organised represent a much higher percentage than 63·8 of possible trade-union membership. The finishing trades are not included in the figures given above. At the same date there were twenty-eight trade unions in the finishing section, with a total membership of 58,818.

matters. By far the largest organisations are the Amalgamated Association of Operative Cotton Spinners and Twiners, the Amalgamated Association of Card Room Operatives and the Amalgamated Weavers' Association.

Besides divisions due to locality or to the nature of the work in which their members are engaged, the unions in the industry differ in structure. There are open and closed unions. Of the former the Amalgamated Weavers' Association is a good example. It is open to men and women without distinction, and will accept all workers who have any connection with the weaving side of the trade. Other unions on the manufacturing side cater specifically for clothlookers, overlookers or twistors and drawers. In contrast, entry to such organisations as the Card and Blowing Room Operatives' Association and the General Union of Associations of Loom Overlookers is subject to strict supervision, chiefly designed to regulate the labour supply.

The finishing section is served by unions of three kinds. There are those which are confined to the finishing trades. Of this class are the Amalgamated Society of Dyers, Bleachers, Finishers and Kindred Trades, which covers Yorkshire and Scotland ; and the Operative Bleachers', Dyers' and Finishers' Association, which operates in Lancashire only. Secondly, some operatives belong to the National Union of Textile Workers, an organisation which has members from all sections of the industry. And, finally, the National Union of General Workers has extended its activities to include a considerable number of the workers in this section of the cotton trade.

For many years the cotton operatives have been strongly organised, though in this, as in other industries, the prolonged trade depression has weakened the position of the unions. In 1920 the Amalgamated Weavers' Association had a membership of 228,000 ; to-day the figure is approximately 122,000. The decline in membership is almost exactly parallel with the rise in unemployment, since the association calculates that there are between 110,000 and 120,000 surplus employees in the manufacturing section of the industry. The same process is apparent, though not to the same degree, in the rest of the industry. The Operative Cotton Spinners and Twiners have dropped to 40,000 from a maximum of 55,000, and the Card and

Blowing Room Operatives from a normal strength of about 75,000 to 66,000.

Amongst this multitude of associations and unions the absence of any unifying organisation for the industry as a whole is striking. Sectional interests predominate, and, as a result, working agreements and negotiating machinery are framed to meet the requirements of one part of the industry or another, or even of one locality or another. The agreements reveal considerable differences in labour conditions, which may be partly accounted for by the range of processes and products within the industry. Nevertheless, other industries, with as wide a diversity of interests, have found it possible to establish some form of centralising organisation, and it is pertinent to this inquiry to point out that there is evidence that the sectional methods of the cotton trade have proved inadequate with regard to certain issues of importance arising between the employers and the operatives.

In 1932, wages disputes in both the spinning and the manufacturing sections proved incapable of peaceful solution within the trade. Stoppages took place, and the Minister of Labour was forced to intervene. In a letter dated September 5th of that year, and addressed to both parties in the manufacturing section, the Minister drew attention to the most ominous feature of the whole dispute.

“While one isolated issue may appear to be the immediate cause of the stoppage, it is clear that it has arisen from the virtual breakdown of the system of collective negotiation in this section of the cotton industry. For the past three years there has not been a single subject of any importance upon which it has been found possible to reach general agreement. Such agreements as have been made have been made independently of the normal machinery.”¹

The agreements which were finally reached made provision for the improvement of conciliation machinery, and the better honouring of agreements, but sufficient time has not yet elapsed to judge the efficacy of these arrangements.

The divisions within the cotton industry, and the failure to provide adequate machinery for the resolution of internal

¹ *Ministry of Labour Gazette*, October 1932, at p. 860.

problems, have obvious bearings on an investigation into alleged trade-union restrictions. Suggested explanations have been found in the peculiar history of the Lancashire cotton trade, and its method of finance. Attention has been drawn to the post-War history of the industry, to the effects of the boom in 1919-20 and its rapid collapse, to the decline of the Eastern markets, to tariffs, and to increased foreign competition. An examination of the relative importance of these various factors is outside the province of this inquiry. It is, however, necessary to draw attention to the fact that, under the protection of high tariffs, and in some cases with the aid of the Governments concerned, cotton manufacture has become an established industry in a number of countries where it was unknown or of little consequence before the War.

Probably the most dangerous of Lancashire's rivals is Japan. The cotton industry there is organised on sound lines, with large reserve funds. Technical efficiency has been steadily developing side by side with the growth of a skilled class of artisans. Throughout the investigation, continual references were made to the increasing intensity of Japanese competition, and it was alleged that lower wages and longer hours gave that country a signal advantage. In illustration, one English firm of calico printers stated :

“In the Indian market, Japanese goods imitating ours are quoted at prices for the printed article cheaper than we can buy the cloth on which we have to start doing our work.”

That the English cotton industry is faced with grave and serious problems no one will attempt to deny. The case of Blackburn, to take but one instance, provides a significant illustration. Before the war there were, in that town, over 92,000 looms in operation—to-day only one third of these are in use.

II. THE EMPLOYERS' POINT OF VIEW

A. Recruitment and Utilisation of Labour. In the cotton trade, as in the other textile industries, a large proportion of juvenile labour is employed. Boys and girls are taken on at fourteen, direct from the elementary schools.

They are often relatives or friends of employees, and the trade has little difficulty in securing recruits without recourse to advertisement or to the Labour Exchange. Very few of these juveniles, however, are given any systematic training as apprentices or learners, since the industry is, "for all practical purposes, based on production by automatic and semi-automatic machines." In the report of the Ministry of Labour upon Apprenticeship and Training, attention is drawn to the fact that, whereas industries such as engineering, building, and printing still maintain many of their handicraft characteristics, despite the developments of methods of mass production, the textile industries do not.

"It follows that the training given to the young workers in the textile factory is quite different from that given to the young workers in the building, engineering, and printing industries, and it is generally much less systematic. There are, in a textile factory, a large number of light jobs, such as 'doffing' and 'creeling' (i.e. carrying bobbins and changing them on machines), which are well suited to juveniles, and which give them constant opportunities of watching the adult workers engaged in the various productive processes. They are thus prepared for the next stage, of becoming helpers in the actual processes of production. . . . Many young workers thus get a very considerable, but a generalised, familiarity with textile processes, whereas apprenticeship or learnership in other industries is more usually a training for one specific occupation and no other."¹

Apprentices are, of course, engaged for maintenance work, but otherwise in the spinning section apprenticeship is practically confined to the card room. There the strippers and blowers insist on a limit of one apprentice to three journeymen; training is for two years, not to be commenced before attaining the age of eighteen. The employers do not complain of the limitation, but they believe that apprenticeship is being insisted upon in order to raise the status of the card-room workers. One employer explained that

¹ *Report of an Inquiry into Apprenticeship and Training*, Vol. IV., at p. 6.

"The function of a card machine is to fiberise a lap sheet. . . . During the last few years the stripping apparatus in the card room has been considerably improved, and, whereas the men had to work in pairs before, they can now work singly with the latest stripping apparatus. . . . We could employ, particularly with this newer apparatus, men who are not so skilled, nor should we require so many of them."

An instance was quoted of Lancashire men who have gone out to management jobs in Russia, and who claim to be able to train unskilled labour as strippers and grinders in two months.

In the finishing trades the calico printers have apprentices in the machine-printing, block-printing and engraving departments. These trades have the old craftsmen's tradition of a seven years' training. Hand-block printing is a dwindling, if not a dying, trade, much of its work being done nowadays by what are called "surface" machines and the still newer process of screen printing. The question of apprenticeship conditions is therefore not of such importance in this department as in the machine-printing and engraving sections. Here, and particularly with the machine printers, the employers complain of the lack of co-operation of the unions in securing proper recruitment to the trade by refusing to allow the laying down of apprentices up to a numerical ratio to the number of journeymen, according to the practice which had obtained for many years before the War. In view of the heavy cost of engraving compared with pre-War days, the employers state that in Japan, Canada, the United States and in some parts of the Continent a considerable amount of engraving, namely, the pintagraphing, is done by girls. In England the Engravers' Union would undoubtedly oppose such a proposal if it were mooted.

Some employers, when discussing the problem of the recruiting and training of young workers, took occasion to criticise the usual method of promotion, which generally follows the rota system. A man in a spinning-mill depends on length of service and the chances of vacancies for promotion, and capability and industry avail him comparatively little. Also firms have found it exceedingly difficult to get rid of workers except for gross delinquency. In all

other cases the unions will fight attempted dismissals, and though they do not object to operatives being put on short time, they always insist that such workers shall be given preference when full time work is again available.

The cotton industry does not appear to suffer so severely from demarcation difficulties as some others. The strippers and grinders as a general rule refuse to undertake any other work during their slack periods, but one firm has an agreement with the union that these men shall be employed at the full list wage, "but that they shall assist on other work in the card room, which means that they will assist to do any work which they are directed to do." Another section who insist very strictly on the exclusiveness of their trade are the mill warpers. This trade, it was stated, has become practically the monopoly of certain families, and they have demanded so high a rate of wages that manufacturers have been forced to find some alternative method of preparation, with the result that the warpers' occupation is disappearing.

In the manufacturing section of the industry the employers state that it is extremely difficult for a skilled weaver to enter the ranks of the overlookers. The latter resist any attempt of this kind, and both they and the tape sizers pursue a deliberately exclusive policy. Amongst the finishing trades there seems to be no demarcation trouble. With the skilled workers, such as the engravers and the printers, interchangeability would not really be practicable, and the unskilled operatives are ready to undertake almost any kind of job. In Yorkshire, especially, it is quite common for a man to be doing one kind of job on Monday, another on Tuesday, and still a third on Wednesday.

A question which has raised some difficulties in the finishing section, and which may perhaps be considered in this connection, relates to the respective spheres of employment open to men and to women. The trade unions strongly resent any attempt to employ women on work which they have not previously undertaken, even though such work may be quite new in character. A great deal of the work in connection with artificial silk, both on the Continent and in Scotland, is undertaken by girls, but an attempt to employ girls in Yorkshire on "making up" met with opposition from the unions. They argued that the "making up" (i.e. folding and tying) of cotton and wool goods

had always been men's work, and that therefore men should be employed for similar work on artificial silk. The employers explained that they did not propose to put women on to any of the heavier work, only on to the lighter tasks for which they were particularly suited, and the unions finally gave way.

B. Hours and Wages. In 1919 a forty-eight-hour week was established throughout the industry. The Master Cotton Spinners' Association abrogated this agreement from January 1st, 1932, believing that "the reduction of working hours in 1919 was premature and far too drastic." However, in their agreement of November 8th of that year, with the Amalgamated Association of Operative Spinners and Twiners, and the Amalgamated Association of Card, Blowing and Ring Room Operatives, the following clause was included :

" 11. It is agreed that (a) the forty-eight-hour normal week in the cotton spinning industry shall be restored ; (b) the circumstances of the industry require that the maximum production shall be secured, and the parties therefore agree to discuss and settle by the usual procedure, supplemented by the additional conciliation procedure, the means by which working hours may be made as fully effective as possible."¹

The unions in the spinning and manufacturing sections of the industry have always refused to countenance overtime working, and this is a matter on which some employers feel strongly. In order to facilitate production, agreements have been reached with the Cotton and Kindred Trades' Federation of Enginemmen and Firemen in the spinning section, and with the tape sizers and the boiler-men in the weaving section, that,

"owing to the nature of their employment, [they] must work whatever overtime may be necessary in order to maintain and run the plant forty-eight hours per week."²

Payment is made at the rate of time and a quarter for the first two hours and time and a half thereafter. Apart from this, however, overtime is not permitted.

¹ *Ministry of Labour Gazette*, November 1932, at p. 413.

² *Federation Year Book*, 1932, at p. 105.

It is suggested by employers, particularly among the spinners, that the rigid forty-eight-hour week, without the possibility of overtime, places the Lancashire trade at a disadvantage. Foreign competitors may do lip-service to the principle of a forty-eight-hour week, but, by means of overtime, extra shifts, and so forth, they actually work a good deal more. The trade unions also object to night work, and though it has been established in a few cases it is worked under considerable difficulties. Men have to be employed, and an example was given where men are employed at 36s. a week on night-shift to do work which girls usually do at 28s. per week. Another disadvantage is that, when machines are used by labour other than that normally employed on them during the day, the unions demand that some compensation should be paid to the day operative because of the alleged unsatisfactory state in which the machines have been left. It is claimed that petty restrictions such as these mean a much greater comparative loss to the industry than they do gain to the operative.

In the finishing trades the unions do not refuse to work overtime. There are agreed overtime rates of time and a quarter for the first two hours and time and a half thereafter. This applies to Lancashire only. In Yorkshire there is another arrangement, whereby any overtime worked between 6 a.m. and 6 p.m. is paid at the rate of 3½d. per hour on top of the ordinary time or piece rates, and at 7d. per hour after 6 p.m., or 12 noon on Saturdays. Moreover, in Yorkshire, the operatives in the dye works have agreed that the plants may be worked sixty-six hours a week without any overtime by the employment of extra men, and this is of real benefit to the trade. The unions would like the working of overtime to be restricted, but the employers point out that this is not practicable where work is largely seasonal and dependent on commission orders. They are fully "in favour of curtailing overtime wherever practicable."¹

¹ The latest information (November 1933) is that the unions have asked that overtime shall be limited to six hours per week. The employers have replied that "the trade is unable to concede any variation of present conditions which would increase the cost of production," and the unions, according to an official, "are going seriously to consider the advisability of calling upon our members to cease work after they have worked forty-eight hours in a week."

The chief difficulty relating to hours with which employers in this section of the trade are faced arises from the attitude of the skilled workers, especially the machine printers. The employers have found them very obstinate in regard to suggested changes or modifications in the ordinary hours of work. The General Workers' Union is prepared to agree to a three-shift system, but the printers' union will not consider it. They will allow two shifts, between 8 a.m. and 7 p.m., and, with certain limitations, between 7 p.m. and 7 a.m., but no more.

Wages in the cotton industry are extremely intricate. The majority of the spinners and of the weavers are on piece—90 per cent of the spinners, including all women employees. Rates are calculated on lists which were drawn up many years ago when conditions in the trade were very different. For instance, in the spinning section, the two chief piece-work lists, the Ashton list and the Oldham list, were drawn up in 1860 and 1876 respectively. The outsider finds them almost impossible to understand, but it is of the difficulties of revision rather than the principles on which they are based that most employers complain.

Two examples were quoted to show the kind of difficulty that arises. The unions will oppose the revision of a price list even where it can be shown that the operatives are paid over the list rate. Thus the mule spinners in two mills went on strike, and the card-room workers joined them in sympathy, because the management wished to re-time the mules. Again, the twistors and drawers, whose work has been greatly eased since the rates were established by improvements such as mechanical reachers-in, resolutely refuse to consider any revision.

“The men are standing entirely in their own light, because they have had their work reduced by more than half, and have insisted on the old rates. Their wages are 50 per cent to 100 per cent higher than in 1914. . . . The occupation has now been so mechanised that it would not be a difficult thing to put women on the job, and the rates would fall considerably.”

One employer criticised very severely this method of calculating wage rates, and his comments demand consideration, as none of his fellow employers made any real attempt to justify the system. He called attention to the

hampering nature of these old lists, yet "masters and men both cling to these absolutely absurd and inadequate wage lists. They both realise that they are as bad as they can be, yet the fear of the other side getting some advantage prevents any alteration being made." The system is uneconomic, for it makes it necessary to average out the work between different workpeople. For instance, a weaver operating four looms is given two hard sorts and two easy sorts.

"If the operative has four hard sorts it is too much, if he has four easy sorts it is too little to look after. As the hard sorts and the easy sorts are paid the same or approximately the same piece price, the result is that we are getting our hard sorts done at a relatively low wage cost, and our easy sorts done at a relatively high wage cost. This tends to drive away to other countries the easy sorts, and to attract to this country the hard sorts. The only way to stop it is for masters and men to come together to frame a wage list, so that for *every* cloth a fair piece price is fixed. Similar conditions probably prevail in every case where piece prices are paid in cotton spinning and manufacturing, except where the constant change of sorts has proved such a nuisance that a fair price has been established."

This employer gave another example of the way these lists may operate in practice.

"According to these inadequate regulations a drawing frame tenter's wage is made dependent on the spindleage of the slubbing frames. In the old days one drawing tenter supplied one slubbing tenter; to-day there is no such arrangement, yet the drawing tenters are paid from indicators on the slubbing frames. The present position is that I am unable to calculate what the wages for drawing tenters should be from the 'Universal List for Frames.'"¹

In the finishing trades there is a large percentage of piece work, and it is asserted that "the General Workers' Union does not object to piece work; they advocate it." In June 1928 an agreement was reached covering the dyeing, bleaching, and printing trade whereby collective piece

¹ Another employer states that, in certain cases, a drawing tenter may be paid from an indicator on the drawing frame.

work should be established by any firm if a majority of the employees desired it. The rates must be fixed to be capable of yielding a minimum of 25 per cent above the recognised basis rates. In these trades, wages are calculated on a sliding scale varying according to the cost of living. This scale was established in 1917, and has worked most satisfactorily ever since. "It has enabled us to get a better atmosphere between the unions and the employers, and has enabled us to get a fair discussion of all sorts of things." Several of the employers in this section of the industry are strongly of the opinion that a great deal of trouble might have been avoided if the spinners and weavers had had some equivalent arrangement. They point out that discussions between employers and workers in those sections have been a case of "pull devil, pull baker," and have begun and ended as a struggle over wages. To-day the spinning and weaving employers are at last beginning to enter into fuller discussions with their men, but "it is no use starting that at a time of deep depression. It should be done also during times of prosperity, even if the truth may turn out to be unfortunate from the point of view of the employers."

C. Other Conditions affecting Efficiency and Output. Deliberate restriction of output by the trade unions is not a feature of the cotton industry. Piece-work earnings throughout the trade show considerable variations, and the systems of collective piece work which obtain in some parts appear to work satisfactorily. In the finishing trade, among the unskilled workers there is no attempt at restriction by the unions, though it is rather more difficult to speak so positively regarding the craftsmen. In the other sections it is said that the workers will sometimes be careful not to over-exert themselves when a new process is being tried out, in order to keep the rate high.

The chief form in which restriction of output operates relates to the question of the use made of machines, and of mechanical improvements and inventions. It was with this consideration in mind that a mill-owner remarked :

"There is definitely a tendency on the part of well-organised trade-union labour to restrict output down to the average of the slower worker."

He was of the opinion that the men do not make all the use they might of the facilities provided, and that there is a tendency to look with disfavour on the man whose rate is above the average.

The most important and far-reaching issue under this head is known as "the more looms per weaver question." The custom in Lancashire is for one weaver to look after four looms, and for some years now the employers have been contending that improved devices and rearranged conditions of work have made it perfectly feasible for one man to have more than four looms under his charge. "We have demonstrated to our own satisfaction, and to the satisfaction of independent observers, that, given an alteration in conditions and other work done for them, they could be expected to work six, eight, ten, or even twelve looms."

This whole question has been agitating the cotton manufacturing section of the industry for years, and the unions have taken a firm stand. They have not attempted to limit the number of automatic looms which a man may work, but this is not of much importance, since these looms are not suitable for all types of work, and are not, except on favourable plain work, as cheap to run as the ordinary Lancashire loom. The controversy has raged round the Lancashire loom, the unions refusing to agree to any increase, on the grounds that the work might become unduly hard and that a large number of men would be displaced, and the employers arguing that, if an increase were not permitted, a great many more men would be out of employment.

Ultimately the unions gave way on the matter of principle, and an agreement was reached to operate from January 2nd, 1933. It establishes the six-loom-to-a-weaver system for cloths up to and including five lifts, and with not more than 200 threads to the square inch. Further negotiations are to take place with regard to other cloths. The agreement is subject to a number of "general conditions," of which one of the most important runs as follows :

"This list is based on conditions being provided which will enable a weaver of average ability to earn approximately 41s. per week when employed for forty-eight hours on six running looms weaving standard cloths."¹

¹ *Ministry of Labour Gazette*, January 1933, at p. 11.

Other conditions relate to such matters as displacement of labour, looms' speeds, and so forth.

The new system has not been in operation long enough for its effects to be accurately gauged, but difficulties have already arisen with regard to the "general conditions" referred to above. The employers desire its extension to other cloths, and negotiations with that end in view are in progress.¹

The spinners draw attention to a number of instances where production could be speeded up with comparatively little extra effort. For instance, formerly, oiling of machinery was done prior to the engine being started up, but now it is done afterwards, and often no one starts work till the last man in the room has finished his oiling.

"This is one of the concessions obtained by the mule spinners during the boom period, when employers were not particular about such minor points as that. During the present negotiations² this question has come up under the heading of anomalies which employers would like to see removed. It is up for discussion."

Attention has also been drawn to a number of improvements in arrangements for cleaning-gangs, whereby time might be saved and production increased.

It is also said that, if the employers wish to make any change, the unions will take their stand on the letter of the law without giving adequate consideration to the interests of their own members. A firm introduced vacuum cleaning of machinery in place of the old brush cleaning. The new system meant that the men could work singly instead of in pairs, and no doubt resulted in the long run in some saving for the firm. But vacuum cleaning is a far safer method, and the risk of accidents was very substantially lessened by its introduction. The men in the mill in question were satisfied with the new arrangement, but the union took the matter up on the ground that vacuum cleaning was not mentioned in the rules, and therefore ought not to be permitted. Lengthy negotiations were necessary before agreement was reached and a rule inserted setting out the conditions under which vacuum cleaning would be permitted.

A number of employers complain that the benefits

¹ November 1933.

² 1933.

obtained from mechanical improvements are substantially less than they should be, owing to the opposition of the unions to any revision of the rates of pay. A great deal has been done to lighten the work of strippers and grinders, but it has not been found possible to secure any proportionate revision in the wages of these workers, nor easy to increase the number of cards to a grinder. Under the terms of the Universal List for Cards, fifteen is the normal number, and the wage per card varies according to the weight put through. The Bolton list specifies twenty cards per man, and there is a standard wage, whatever the production may be. Employers argue that: "With the numerous labour-saving devices of to-day, it is a practical proposition for twenty-five cards to be within the competence of the worker."

Employers in the finishing trades find that their chief difficulties in this connection arise when new plant is installed. As a preliminary the unions always try to relate the machine to similar machines or jobs of which they have had experience. They then argue that the same number of men as before should be employed, regardless of improvements making certain processes automatic and eliminating heavy work such as lifting. In a recent case, where a firm was undertaking a new class of trade, a man transferred from another branch refused to convey goods for three machines as he had formerly only done it for two. His union backed him up in his refusal, without knowing—or finding out—the true facts of the case. Actually the new work was easier than the old, as the distances were shorter, the appliances better, and the goods lighter. When the union was acquainted with the facts they withdrew their opposition.

The position in the finishing trades has been considerably easier of late, and the unions have not been so obstructive. It is suggested, however, that this is due to the present economic conditions, and that, "if trade was good, and they were allowed to do so, they would revert to a lot of their old methods of restriction."

III. THE TRADE-UNION REPLY

A. Recruitment and Utilisation of Labour. On the subject of recruitment of labour there is some divergence of

view among the unions in the cotton trade. Neither the Amalgamated Association of Operative Cotton Spinners and Twiners nor the Amalgamated Weavers' Association has any system of apprenticeship, and they make no attempt to limit entry. The boy or girl who enters the trade is gradually trained to proficiency while undertaking comparatively easy work as a doffer or a little piecer. "It is a gradual training up of youth in dexterity and experience. . . . No adult could come in and attain any sort of proficiency as a spinner if he had reached mature years" (p. 68). This method of training is regarded as quite satisfactory by the spinners and weavers, and they have no wish to introduce a system of apprenticeship. One official remarked: "I always regard apprenticeship as a means of keeping out adults who might come in and learn the trade in two or three weeks. For instance, during the War, some industries had to take girls in, and they proved themselves able, in a few weeks, to do the work as well as the men."

The remark quoted above is interesting, in that it accords with the opinion of the employers regarding the apprenticeship which exists for workers in the card room (pp. 63-64). The Card and Blowing Room Operatives' Association insists on a two years' apprenticeship for all strippers and grinders, and they keep a strict check on the number of recruits entering these trades. According to the employers, recent improvements have rendered many of the processes automatic, and they believe that a long specialised training is now unnecessary. They do not complain of difficulty in obtaining labour, but rather that the real reason for insisting on apprenticeship is to use it as a lever to raise the status of the card-room workers.

In reply the association argues that a careful training is necessary in the interests both of the men and the machinery. There is danger that an unskilled operative may harm himself, and also damage a delicate and expensive machine. Moreover, recent improvements have not eliminated the need for skilled handling of the machine. "Vacuum stripping has been introduced in a number of mills during the last ten years or more, and the employers are contending that it does not need a skilled man, and we do not agree with them. Our men contend that it takes as long to strip with a single-nozzle vacuum stripper as it

does with a brush, and stripping is only one part of their duties. No one would think of putting this work into the hands of any but a skilled man" (p. 64; see also p. 72).

The card-room workers also find the apprenticeship system useful as a means of controlling the recruitment of workers. "We try to regulate the number of entries in accordance with the exigencies of the demand of the trade. We want to keep our men employed as much as possible." Such a desire is but natural, but it is suggested that, in more prosperous times, the possibility of checking recruitment might prove a valuable weapon in any dispute with the employers. At present it serves a defensive purpose, as the association admits quite frankly. "We know that, if there is a surplus of men walking about, our wages are jeopardised, and we want to keep them as high as we can."

Arising out of the discussion on recruitment and training, certain employers express dissatisfaction with existing methods of promotion and dismissal (p. 64). In the first place, they allege that they are forced to follow the rota system in promoting spinners, and thereby debarred from giving recognition to outstanding merit and industry. The spinners' union finds some difficulty in understanding this complaint, since they also desire that outstanding merit should receive due recognition. They believe that, where merit is equal, seniority should decide, but they point out that there is no joint agreement on the subject, and the employers take their own course.

Dismissals are a different question, and here the unions have very decided views. Employers complain that they have the greatest difficulty in dismissing a worker, except in cases of gross delinquency. They state that the unions always fight any other dismissals; that often the best they can achieve is that a man shall be put on short time, to return to full work when it is available (p. 65). The men do not deny the substance of this charge. "It is the policy of our union," said a card-room official, "to insist upon men being taken back. We do not say that there shall be no dismissal, but we do not allow dismissals to take place on very trivial matters, and we hold out against it. We would be prepared to allow dismissal for gross negligence of duties."

The other unions concerned do not lay down so definite a policy. They point out there is naturally more trouble over dismissals when chances of other employment are so poor. The unions are pressed to investigate cases, and they often find, when inquiries are made amongst other workers in the mill, that the reasons given for depriving a man of his job are not, in their opinion, adequate. The weavers' association has asked that there should be a joint committee of employers and workers to consider dismissals, but the employers will not consent. In the opinion of the workers, it is not fair that, where bad work is alleged, the employer should be both judge and jury as well as one of the parties to the case.

To illustrate this contention the weavers refer to the system of fines for bad work. If unmerchantable material is produced, it is the practice of the employers to impose fines of varying amount. The unions have brought the matter before the courts, but have failed to establish that it is a violation of the Truck Acts. Nevertheless, they contend that a worker is thus liable to be penalised for faults due to circumstances outside his control. If the employers would abolish the fines system, and set up a joint committee, they would be prepared to co-operate and to agree to the dismissal of any operative who was proved, on investigation, to be personally at fault.

Workers in the cotton industry, as has been described, join a particular section of the trade, and, as their experience increases, gradually progress to more skilled work within that section. The different classes of work are so distinct that there is little overlapping, and consequently few occasions for disputes regarding demarcation lines between trades. Reference was made by certain employers to the fact that the card-room workers are often unwilling to undertake other work during slack periods (p. 65), but this does not appear to be a major cause of difficulty.

The majority of the card-room workers are female, and, when their work is stopped, there is nothing else suitable on which they can be employed. The card-room male operatives, on the other hand, who only average perhaps six or eight to a mill, can be employed on other odd jobs in or about the card room when the machinery is stopped. The employers' federation advises that this shall be done, and they have the full support of the union. The only

regret in the minds of the latter is that a similar arrangement is not possible for the women workers.

B. Hours and Wages. During the 1932 spinning dispute the employers attacked the forty-eight-hour week, but ultimately gave way on the understanding that every possible avenue should be explored "by which working hours may be made as fully effective as possible" (p. 66). The unions regard the preservation of the forty-eight-hour week as all-important, and, while anxious to co-operate to ensure that the full measure of work is given, they require convincing proof that any suggested rearrangement of working hours will not endanger the forty-eight-hour limit.

Generally speaking, the unions are opposed to overtime (p. 66). They believe that it should not be necessary, given proper organisation. Nevertheless, they are prepared to make some adjustments in times of difficulty. For instance, the Card and Blowing Room Operatives' Association realises that a breakdown in one process may delay the whole works, and in such cases "we are quite willing to consider applications for overtime. Each case which is put up before us is dealt with on its merits." At the same time, the union will not permit overtime before 7.45 a.m. They are afraid that, if they do, the employers will use it as a lever to re-establish the six o'clock starting time and the 55½-hour week. They point out that, while females may not work overtime, permission may be obtained from the Home Office to work them up to 55½ hours. Bearing these possibilities in mind they "are very anxious indeed to prevent the thin end of the wedge being got in for a 55½-hour week by means of overtime." They will only agree to it in certain cases as a compromise to prevent a mill from being held up.

The unions in the finishing trades have not, in the past, opposed the working of overtime to the same extent as have the unions in the spinning and weaving sections (p. 67). They realise that the conditions of the trade may, on occasion, make it necessary. The employers have expressed the view that overtime should be curtailed wherever practicable, but the unions are of the opinion that the implied undertaking is not being put into effect. "Indeed, we have been sending out to all districts and we find in a large number of cases they are working seventy

hours a week." They have, therefore, suggested that overtime should be limited to six hours per week, and, if the employers will not agree to restriction, "we shall have to face the other alternative of calling on our members to cease working overtime altogether."¹

Night work and a double-shift system are other methods which have been suggested to increase production (p. 67). The unions consider that these would be very difficult to put into practice, and that the resultant saving would not justify the attempt. In the first place, women could not be employed at night, so that men would have to be engaged at a higher rate of wages, exclusively for night work. A lesser difficulty would be that two tenters would handle one machine, which would inevitably lead to disputes as to who was responsible for bad work, etc. The spinners state that they have "never been asked to agree to any such system except in isolated instances, and I should think it is a year since we have had one of these cases." They believe that the reason is that the saving, though apparently great, would in effect be negligible. "The Cotton Yarn Association went very exhaustively into the saving which would result from night work, and it came down to no more than 1 or 2 per cent."

On the manufacturing side the Amalgamated Weavers' Association states that the employers' organisation has never asked it to agree either to overtime or to a two-shift system. It is opposed to both as unsuitable for female workers, and unnecessary if the industry were properly organised. In its opinion, if a two-shift system were established to-day, it would "smash our industry from top to bottom. It would drive out the inefficient mills, and certain districts would become derelict in a very short time by reason of the increased production which would take place at the more efficient plants." On the other hand, it does not believe that the reduction in costs would be great enough to enable the industry to dispose of its goods in the world market in competition with prices which rule there to-day. "It has been estimated that the saving in production costs on a two-shift system would be round about from 4 to 5 per cent, and this in itself is not a sufficient inducement to warrant the change over to the two-shift system."

¹ See *ante*, p. 67, footnote.

While there is a standard working week in the cotton industry, there is no such general agreement covering wages. The great majority of the workers are on piece rates, and the bases on which these are calculated vary in different districts (p. 68). Employers generally complain of the difficulties which attend any attempt to secure a revision of the rates (p. 68), and assert that the operatives object to re-timing regardless of changes in equipment and other facilities.

The unions agree that revision of rates is always a troublesome question, but they deny that it is a general cause of dissatisfaction. According to the card-room workers, a number of mills have been re-timed within recent years, and in each case the matter has been settled amicably. The spinners admit to trouble in certain instances, but "do not think we have more trouble in that direction than other trades. Of course, the employers' idea of revision is always in a downward direction." They do not agree with the criticism made by one employer that the whole system is antiquated and unsatisfactory (p. 69). On the contrary, the spinners' union takes the view that "in our trade there is not much alteration taking place, and all these things have been settled for years and years, and unless some very substantial and convincing reason can be given for revision the union opposes it."

The spinners, however, are prepared to admit that unfortunate anomalies may arise through local variations. For instance, the packers have little cohesion between their organisations in different towns, and this has resulted in a great disparity of rates, which better organisation would have avoided. Amongst the spinners proper the agreements in the different towns are substantially the same, with the exception of the Oldham list. In the Oldham district there is a provision by which the rates are not made permanent until the mules have been running for twelve months; that is until the initial stiffness has worn off and the mules are running at their normal speed. The example given on p. 68, concerning difficulties in re-timing, probably refers to the Oldham district. In the absence of greater detail the union officials were unable to give a full reply, but "probably the employers wanted a re-timing, and the reason they gave was outside the regulations." In this district, after the timing at the

end of twelve months, "there would have to be a very great alteration for the workers' representatives to agree to any further re-timing, but it is not incorrect to say that such re-timings have taken place."

On the manufacturing side the great bulk of the workers are paid according to the Uniform List of Weaving Prices, and there is not, therefore, the same criticism on the ground of local variations. "It is a very complicated method by which wages are ascertained, and the principle embodied in this list has been in existence from sixty to eighty years. Those who are engaged in the trade understand this list, and have found it both workable and efficient. It is not perfect by any means, but it is the only method that has found any degree of favour generally within the industry."

The foregoing quotation shows that the weavers' association is satisfied with the basis on which wages are calculated. Nevertheless, they, and the spinners also, are far from satisfied by the way in which the scales take effect in practice, and they protest very strongly against the constant attempts by the employers to reduce the rates of wages.

In support of their contention the weavers cite the new more-loom agreement. It might be thought that, by working six looms instead of four, a weaver would considerably augment his production, and therefore his wages. But the increase in the number of looms has brought a "slowing down of between $7\frac{1}{2}$ and 10 per cent on their previous running speed." Bearing this in mind, it is found that, by the new agreed price list for six looms, an operative who was earning 40s. a week of forty-eight hours, working four looms, will earn 41s. per week, working six looms. That is to say, he will earn 1s. more per week, provided all his looms are working. But, if he finishes a warp and there are no more orders coming in, he will come down to five looms, and then perhaps to four or three. He will still have to be at the mill for forty-eight hours, but he can only earn five-sixths or four-sixths of 41s., according to the number of looms he has running.¹

¹ According to "the more looms to a weaver system agreement," an operative is guaranteed a retention wage of 28s. or 66 $\frac{2}{3}$ per cent of his full wage, whichever is the higher (Rule 9). This, however, does not apply to four-loom weavers, who may suffer a cut of 50 per cent through under-employment. After twelve months' experience the unions believe that the retention clause is "more honoured in the breach than the observance."

The unions point out that this matter of under-employment is very serious. "There are great numbers of weavers in Lancashire who are earning less under the six-loom system than they earned under the four-loom system, owing to the vast amount of under-employment which is now more prevalent than it has been in any time of our history." Naturally, the operatives are opposed to any further downward revision of the rates when so few of them are receiving the full rate of pay as it is.

C. Other Conditions affecting Output and Efficiency. The chief points advanced by the employers under this head concern improvements in machinery in the card room (pp. 64, 78), and the more-loom-per-weaver question (pp. 71-72). In the former case the employers contend that, despite changes and mechanical improvements which have considerably lightened the work of the strippers and grinders, the union will allow neither an increase of cards per worker nor a proper revision of the rates.

In the opinion of the card workers' union, the value of these labour-saving improvements may easily be over-estimated. "Our occupation is considered a very dusty one. In that connection, vacuum cleaning would certainly make it somewhat healthier, but nothing like so easy as the employers claim, for our men contend that it takes as long to strip with a single nozzle as it did with a brush." A double nozzle which strips the cylinder and the doffer simultaneously, has recently been introduced, and inquiries are being made into its possibilities. Nevertheless, the union is not prepared to admit that a wage reduction is the natural corollary of any new mechanical improvement. "We feel that we are entitled to some of the benefit resulting from any improvement, and the employers should not have it all. If we did not stand out for this it would mean that very shortly every job would be considered unskilled work, and paid for at unskilled rates."

On the second point—that of more looms per weaver—an agreement has been reached whereby on certain sorts of work a weaver may have charge of six looms.¹ The agreement is a compromise, since on the one hand many employers believe that eight or even twelve looms could be worked by one operative, while the unions are not satisfied

¹ For full terms see *Ministry of Labour Gazette*, October 1932.

that the increase will produce any effective results in lowering the cost of production.¹ They point out that the new agreement must entail an increase in unemployment, and they contend that it has done nothing to reduce the evil of under-employment. Further, the operative working six looms earns little if anything more than he did as a four-loom weaver.²

The weavers have agreed to work six looms, but they are far from convinced that the profit to the industry is in any way commensurate with the sacrifice entailed. "It has been established that the reduction in production costs resulting from the more-looms system amounts to from 4 to 4½ per cent on the standard cloths. At the same time these cloths were from 18 to 22 per cent above the prices ruling in the world markets." In the opinion of the weavers' association, these figures are a strong presumptive argument that the solution of the industry's problems is to be found in other directions than by increasing the duties and reducing the wages of the operatives.

It is the contention of all the unions in the cotton industry that far too much emphasis is placed by the employers on the question of wages. These form a very small proportion of the total cost of production, as an employer has borne testimony: "The cost of spinning forms, I suppose, 10 to 20 per cent of the total cost of our manufactured goods. Wages form perhaps 8 to 10 per cent, so that any possible reduction of wages by themselves will not solve the problem. Weaving wages account for 10 to 20 per cent—or probably less—of the total cost of our product, so that a reduction in weaving wages alone will not solve our problem. Two years ago, the bank rate here fell 1 per cent in two months. At that time I calculated that on goods of a certain class shipped to China, calculating from the time the goods were shipped until a final reimbursement in London, as much difference was made in the cost of the goods by the fall of 1 per cent bank rate as 10 per cent reduction in workers' wages would have made."³

The unions in the industry believe that the real hope for the future lies in radical reorganisation. A little has been

¹ It should be remembered that the agreement related to Lancashire looms only, and not to the newer automatic looms. The unions do not attempt to restrict the number of the latter that an operative may work.

² See *ante*, p. 80.

³ *Journal of the Royal Statistical Society*, Part II., 1928, at p. 197.

done, but concerted action on a much larger scale is necessary. A much greater measure of amalgamation, bulk buying of raw materials, mass production and the standardisation of products, the control of distribution channels and of prices, and the elimination of the unnecessary middleman¹—it is along these lines, rather than by further depressing and impoverishing the workers, that the true solution is to be found.

IV. SUMMARY

There are two outstanding matters wherein it is alleged that trade-union policy is restricting the proper development of the cotton industry. These are, first, the arrangement of working hours, especially with regard to overtime, and, second, the application of new mechanical devices and improved facilities, of which the more-looms-per-weaver question is the outstanding example. On these points the employers make out a strong case for the unions to answer.

Other matters raised by the employers are not stressed to the same extent, nor are they supported by a great weight of evidence. With regard to the recruitment of labour, the card-room workers admittedly restrict entry with the object of safeguarding their status, but it has not been shown that this has resulted in either a shortage of labour or in the successful establishment of a claim to an unduly high rate of wages. Demarcation trouble is rare in the industry, and deliberate restriction of output is not alleged. There is some evidence of trouble regarding the fixing of rates for piece work—the employers complaining of the difficulties attendant on any attempt at revision, and the unions retorting that these would be fewer if revision were not always in the downward direction. The lists on which the rates are based were drawn up so many years ago that it seems pertinent to ask whether they could not be more easily administered if they were simplified and brought up to date. However, with a single exception, neither employers nor operatives have suggested that the difficulties in application arise from the methods

¹ In this connection an employer's statement is of interest. He gave it as his opinion that, out of the 2,000 odd merchants or middlemen in Lancashire, not more than 10 per cent are performing any useful or necessary function in the cotton industry.

by which the basic rates are computed, or that these might be reformed to advantage.

On the two outstanding points, however, there is a real cleavage of opinion. With regard to hours, the root of the unions' objection to overtime and other rearrangements appears to be the fear that the forty-eight-hour week will be jeopardised. The employers, especially in the finishing section, advance good reasons to show that overtime is necessary on occasion, but their attack on the forty-eight-hour week in 1932 has inevitably bred suspicion. Until that suspicion can be proved to be false, and until the very large number of under-employed workers in the trade is substantially reduced, the unions have some ground for the position they take up.

Under-employment is also an important factor in the more-looms-per-weaver question. It may be argued that, as the unions have withdrawn from their position of uncompromising opposition to any increase in the number of looms per worker, there is no longer a charge of alleged restriction to answer. But the matter is still hedged with difficulties. The employers wish to extend the system to other cloths, the unions are not convinced that the experiment, even within its present limits, is proving successful, while it is clear that the figure of six looms represents a compromise which is liable to attack from both sides.

The arguments advanced by the employers to show that, with improved facilities, a weaver can look after more than four looms are more convincing than the unions' reply. It seems clear that modern inventions and changes in appliances and working conditions have simplified the weaver's task, with the result that he can be reasonably expected to undertake more than he did in the past. To refuse to consider these new factors in relation to the duties demanded of the operative is unsound. The unions are in a much stronger position when they argue that an increase in the number of looms is useless if, in effect, the weaver cannot take advantage of that increase. They show that often all the six looms are not running; nevertheless, the weaver must be at the mill for a full working week, though he will not receive a full week's wage.

How far the under-employment which is prevalent in the cotton industry could be avoided with better organisation is too large a question to discuss here. But the unions

assert that many so-called restrictions would not appear in that guise at all if the employers would reform their administration. They hold that the employers have failed to show any real conception of the interests of the industry as a whole, and their view is not without support from observers outside the industry. A well-qualified and impartial critic has observed :

“ The result [of the absence of unity within the industry] has been a lack of co-ordination with each section considering the others guilty of unfair practice, and each anxious to exact the maximum return for its services without regard for the possible consequence to the general interests.”¹

If this be considered too severe, it must be admitted that the following statements, made during the investigation, afford an illuminating commentary.

A representative of the weaving employers :

“ In the spinning section you find more restrictions than on the weaving side.”

The master spinners, speaking of the finishing trades :

“ . . . these branches of the trade are in the position to enjoy the advantages of monopoly ; and since the War they have organised to that end. . . . Their policy, we believe, is of serious detriment to the trade as a whole.”

And finally the finishing trades employers state that :

“ We are at the tail end of the cotton and wool trade, and that is our big trouble. We suffer very largely for their delinquencies and their shortcomings.”

One fact at least emerges from this conflicting testimony. The outstanding characteristic of the cotton trade is its complexity, and with a very few exceptions, neither employers nor workers seem able to escape from their own particular tangle to grasp the interests of the industry as a whole. Apart from one or two cases, the inquiry has failed to reveal any evidence of real and helpful co-operation between capital and labour. The necessity for a reduction

¹ “ The Organisation of the Cotton Industry,” *Ency. Brit.*, 14th edition.

in costs of production is so obvious that it should not need to be reiterated. And it should be equally evident that the possible methods of achieving such a reduction can only be discovered if all concerned will unite in a comprehensive examination of the whole industry to ascertain just where the waste is taking place. There are many possible lines of inquiry. To give just one instance—the much greater use made of automatic looms by almost all of Lancashire's foreign rivals suggests a field for further and more detailed investigation. But in whatever directions the solution may ultimately be found, it is clear that nothing essential can be accomplished unless the paramount importance of the common interest, overriding all differences between section and section, between employer and worker, is unreservedly recognised. Unity of purpose, and a general readiness to accept sacrifices equitably distributed and justified in the interests of the industry as a whole, are necessities without which there can be no permanent improvement.

THE DOCK INDUSTRY

I. INTRODUCTION

TO GIVE AN ADEQUATE DEFINITION of the "industry" covered by this report is not easy. To the man in the street all those concerned with the docks, whether as users, employers, or workers, form a very definite section of the community, distinguished alike from the countryman and the townsman by tradition, custom, and outlook. Further than that he rarely cares to inquire. Yet the dock is the focus of a large number of trades and interests. In a country that is largely dependent on foreign trade the efficiency of its ports is of primary importance, for their function "includes the receiving of ships in harbour, putting them in position to discharge or load their cargoes, the handling of the cargo, and its dispatch to or reception from inland destinations. The primary aim of all modern dock operation is to give ships quick dispatch, i.e. to keep down the time in port."¹

In order to fulfil these duties, there must be, in every port, some body or individual responsible for each of the following: the repair and maintenance of the dock itself; the supervision of navigation, lighting, pilotage, etc.; the provision of facilities for the loading, unloading, sampling, sorting, and warehousing of cargoes; and efficient transport to and from the dock by road, rail, water, or all three. And for each service the supply of appropriate labour must be available. In order, therefore, to appreciate the varied nature of the problems which arise, it may be useful to give a short description of the different classes of ports in this country, the types of employers responsible for each function, and the range of labour which is employed.

Ports may be classified under five heads, according to ownership. (a) National ownership. In Great Britain this is confined to naval dockyards, but many of the great commercial ports on the Continent are owned and operated

¹ *Ency. Brit.*, 14th edition, Vol. XVIII., p. 256.

by the State. (b) Trustee ownership. The chief examples in England are London and Liverpool, where the responsible bodies are, respectively, the Port of London Authority and the Mersey Docks and Harbour Board. (c) Municipal ownership. For example, Bristol and Preston. (d) Railway ownership. In some cases, such as Southampton, the railway companies have bought up existing docks; in others, as at Immingham and Cardiff, they have constructed their own. (e) Private ownership. This is not common in England, but the Manchester Ship Canal and the Gloucester Docks and Canal Company provide examples.

The functions of a port owner or port authority are of two kinds; conservancy and dock ownership. Since the material presented in this report was collected in the main from the two largest ports in the country, London and Liverpool, it is appropriate to describe the duties undertaken by the Port of London Authority and the Mersey Docks and Harbour Board. In both these ports the two functions noted above are combined under one authority, though this is not necessarily the case. Conservancy includes the surveying and maintenance of navigation channels, buoying and lighting, signal and pilotage service, within the boundaries of the conservancy area as defined by Act of Parliament or royal charter. Where part of this area forms a highway to another port, these services are generally undertaken by Trinity House. Dock ownership involves the provision of accommodation for ships, and facilities for the loading, unloading, and movement of cargo.

The extent to which port authorities provide these facilities varies considerably. By statute the Port of Manchester has a monopoly of all services within its dock area, but in other cases there is merely the power to provide services if desired, and to make "reasonable" charges therefor. The Port of London Authority is the owner of the docks, but not of the wharves in the port. It provides cranes and other facilities, but does not undertake loading, and only unloads in certain docks. Its chief service is warehousing, and for this purpose it maintains, besides ordinary labour, an expert *entrepôt* staff. The Mersey Board takes an even smaller part in the activities of the port. Except as regards grain cargoes and, to some extent, tobacco, it does not provide labour

for loading, unloading, or warehousing, for "Liverpool is essentially a private enterprise port. The board is the supervising authority providing facilities for the users of the port, meeting demands made by the trade beyond the capacity of private enterprise, and, although possessing wide powers, refraining from interference unless absolutely necessary for the common good."¹

The Authority is the largest single employer in the Port of London, and usually gives employment to some 4,000 dock labourers, and 6,000 other dock employees. Other employers may be classified in groups according to community of interest. First in importance, having regard to the labour employed, which amounts in normal times to nearly one-third of the labour of the port, is the group consisting of the ocean shipowners and the master stevedores. Some ocean shipowners do their own loading and discharging, but it is more usual to make use of the master stevedores, who are contractors for the loading of ships. The former are organised in the London Ocean Shipowners' Group, and the latter, who number about twenty-five, have an association of their own.

Another important group, employing nearly as many men as the shipowners and stevedores, consists of the wharfingers and granary keepers. Altogether there are about a hundred of these employers, who are the owners of the public wharves on the river, and who undertake loading and discharging. The wharfingers have their own group association, to which is affiliated a subsidiary one for the granary keepers. There has been a growing tendency lately for shipowners to hire wharves or berths, and to supply their own labour for discharging the cargo. This is especially true of the next group, the short sea traders, who are engaged in the coasting trade, and on short voyages to ports between the Elbe and Brest. Many shipowners in this group own or rent wharves, berths, and warehouses which they use only for their own trade. They employ a small proportion only of the labour of the port.

Two other groups remain, both of them small but highly specialised. These are the coaling associations, employing

¹ From a lecture delivered by an official of the board before the Institute of Public Administration in 1926. Quoted by F. G. Hanham in *A Report of an Inquiry into Casual Labour in the Merseyside Area*, at p. 18.

a particular class of labour—the coal porters—and the master lightermen. The latter, though not large employers of labour, are very important, for they provide, under contract, barges and labour for all loading and unloading overside, and for all river transport. Their position is due to the peculiar importance of “lighterage” to the Port of London.

The description of employers' groups, as so far outlined, applies primarily to the Port of London. The same general grouping is to be found in other ports, modified and adapted to suit local requirements. In Liverpool, for instance, while several shipping companies have their own stevedorage or portorage department, or both, the master porters and the master stevedores form two important groups of employers. The duties of the master stevedore include loading outward cargoes, and the discharge of goods from the ship's hold to the ship's side. There they are handed over to the master porter, who is under licence from the Board to receive and deliver goods from the vessel, and to perform various services required by the consignee.

The grouping of the men is in many ways as distinct as that of the employers. The general term “dock labour” includes both groups of specialists whose work is easily defined, and a much larger body of general labour which tends to divide up into sections which are not, however, necessarily exclusive or always easily distinguishable as to function. Amongst the former may be mentioned the lightermen (“the descendants on the river of the ancient Thames watermen”), the deal porters, and the grain porters. These men undertake work which often demands a high degree of training and skill, and is quite outside the competence of the ordinary “docker.” The second class includes the shipmen, the quaymen, and such smaller groups as the coal porters. The work which these perform is distinguished rather by the classification of the men employed than by any marked difference in function.

By far the most important of the workers' organisations is the Transport and General Workers' Union. This, the heir to the old Dockers' Union, was formed in 1921, and covers practically the whole range of dock labour. In London the lightermen have a separate union of their own, the Watermen, Lightermen, Tugmen and Bargemen's

Union, and the stevedores and a number of the dockers belong to the National Amalgamated Stevedores and Dockers. In addition, the National Union of General and Municipal Workers extends its activities to the docks. Notwithstanding these other organisations, it may fairly be claimed that the Transport and General Workers' Union represents the interests of, and speaks for, the great majority of the dock workers.

Though employers and workers have for some time realised the value of organisation, it is only comparatively recently that machinery has been set up to facilitate contact between the two sides. Previous to the Court of Inquiry held under the chairmanship of Lord Shaw of Dunfermline in 1920, there was little provision for common discussion, and the industry had an unenviable record of strikes and disputes. Since Lord Shaw's Report, something has been done to remedy this defect, but even so there is not that ease of contact which is found in some industries. Bad blood in the past is not easily forgotten. As a leading employer remarked "one must admit that the dockers have had generations of bad treatment . . . so one is not surprised that there are difficulties."

A National Joint Council for the industry has been set up, which follows to some degree the plan set out in the Whitley Report. Subsidiary to this, the various ports have their Port Local Joint Committees, consisting of an equal number of representatives of the employers and of the men. The council and the committees together provide conciliation machinery, and have already had some success in preventing disputes coming to open conflict. The local committee is, as it were, a court of first instance, and only if agreement cannot there be reached is the matter referred to the Conciliation Board of the National Council. In practice, appeal to the superior tribunal has been surprisingly infrequent.

In other ways besides the setting up of conciliation machinery, Lord Shaw's Report is regarded as a landmark in the history of the dock industry. Several employers have prefaced their comments on the existing situation with some such remark as the following: "All our working arrangements are the result of mutual agreements, and we cannot therefore complain when we are expected to carry them out. Nevertheless, we do feel that the

unions took advantage of the exceptional position at the end of the War, and that the Shaw Report went rather too far. It has set up a standard which we find it almost impossible to get modified." It is important, therefore, to notice the principal working conditions established by the report, and to draw attention to the peculiar features of the industry which formed the basis on which the recommendations were made.

The main recommendation made by the report runs as follows :

"That, with the view to establishing a national minimum standard (to use the words of the claim), the minimum for day workers and piece workers shall be 16s. per day, on the basis of the national agreement for the forty-four-hour week."¹

In other words, the report established the principle of a national minimum wage for the industry, and endorsed the agreement of the previous year for a forty-four-hour week.

In addition, the court recommended :

"That a system of registration of dock labour should be introduced into all the ports, docks, and harbours of the kingdom.

"That wages of dock labour should be paid weekly, and that this system should be introduced at the earliest possible date.

"That the constitution of a National Joint Council and its correlative and local bodies should be undertaken by the dock labour industry on the lines of the report of the Whitley Committee."²

Of these proposals, the first has been partially followed as will be indicated later in this report.³ The second remains a pious aspiration, and the third has been put into practice to the extent shown on p. 91.

In setting out the arguments on which these conclusions are based, the court lays great emphasis on the problem of casual labour in the industry.

¹ *Report of a Court of Inquiry concerning Transport Workers* (1920), at p. 16.

² *loc. cit.*, p. 17.

³ See p. 126-27.

"The court . . . therefore makes no apology to the Minister for dealing with this question of casualisation. In its opinion, to decline to deal with it or to treat it as irrelevant would be to shirk a difficulty and a trouble of large dimensions and of wide social ramifications, but yet one without a settlement of which the prospect of peace at the docks or of amelioration or of contentment will be hopeless.

"The court is of the opinion that labour frequently or constantly under-employed is injurious to the interests of the workers, the ports, and the public, and that it is discreditable to society. . . . In one sense it is a convenience to authorities and employers, whose requirements are at the mercy of storms and tides and unforeseen casualties, to have a reservoir of unemployment which can be readily tapped as the need emerges for a labour supply. If men were merely the spare parts of an industrial machine, this callous reckoning might be appropriate ; but society will not tolerate much longer the continuance of the employment of human beings on those lines. . . .

"As matters stand, however, the daily wage asked to be fixed is the wage of a class upon the footing that this unemployment and under-employment, lamentable as they may be, do actually exist.¹ Casualisation, in short, and that on a large scale, seems to have become part and parcel of the dock industry. . . . It was, and it remains, one of the most appalling problems which confront all those engaged in social amelioration or philanthropic effort."²

To determine how far this indictment still holds good is outside the scope of this inquiry. Evidence bearing on the question will be found in the following pages, especially in the section dealing with the recruitment of labour. Much has been attempted in the way of registration and other reforms, and there is no doubt that the problem is receiving much greater attention than in the past. Equally there can be no doubt that it has not been solved. Casual labour remains a distinguishing

¹ The award was made before the unemployed dockers were eligible for Unemployment Insurance benefits.

² *loc. cit.*, pp. 8-9.

characteristic of the dock industry. As the then Lord Mayor of Liverpool said in 1929, "probably some quarter of our male working population depend upon the casual stand system as the means of seeking their daily bread." And this is equally true of other great ports. No inquiry into dock conditions can ignore the basic fact that the majority of the workers are without security of employment from day to day.

II. THE EMPLOYERS' POINT OF VIEW

A. Recruitment and Utilisation of Labour. (i.) *Recruitment.*

—With the exception of the lighterage group in London, apprenticeship is practically unknown in the dock industry. Only one example was cited during the course of the inquiry, and that concerned certain of the crane drivers in the London docks. Crane drivers are in some respects key men, and they have established themselves as a select inner band within the Transport and General Workers' Union. They are said to be equally intolerant of their employers and of their union leaders, and they exercise a strict control over the recruits to their trade. This control, it is stated, results in a shortage of skilled men. Apart from this one instance, apprenticeship problems do not arise in the industry.

The greater part of dock labour is recruited daily by what is known as the "stand system." A stand is a place where workmen assemble for engagement, and it may be one of several kinds. Some employers have their own fixed stands; others share in a common stand. Others, again, hold a stand "anywhere from north to south, according to where the ship is berthed," and such stands are often not only movable, but also occasional. A stand may be located anywhere, from the employers' premises to a street corner.

Workmen attend at these stands twice daily, between 7.30 and 8 a.m. and between 12.30 and 1 p.m. The foreman selects the men he requires, according either to preference lists established by the employer or to his personal knowledge of the applicants. The men selected are then certain of either a day or a half-day's work. "First preference" men can probably rely on regular work until the job is done, and may be excused attendance at the stands

during the ensuing days, but others will be re-engaged daily.

Most employers recruit the greater part of their labour from the stands. The general practice is to keep a skeleton maintenance staff who are engaged on a weekly basis, and to take on other workers according to need. Many firms have preference lists, and the men high up on these lists are assured of regular work whenever the employer has it to offer. Naturally, however, these "first preference" men represent the minimum rather than the maximum requirements of the firm, and, during any busy period, additional labour is engaged from the pool of casual labour attending the stands.

Thus, by means of the stand system, the employers can rely on an adequate supply of labour, according to their varying requirements, and they have very little criticism to make. They have a pool from which to draw, consisting, in the first place, of known and proved men, and, in the second, of a large reserve of men accustomed to dock work and conditions. A shortage of labour is rare; there is generally a large surplus.¹ Little comment was received regarding the casual nature of the system, and in only one case was the argument advanced that greater security of employment would improve the efficiency of the workers. The firm in question stated that they now made a practice of engaging all their men by the week, and that, as a result, their efficiency was much greater than in 1914. Apart from this, the only evidence offered related to the various systems of registration which have been established with the object of reducing the casual factor in dock employment.

(ii.) *Staffing*.—In each port there are detailed agreements regarding the number of men to be employed for any particular piece of work. There is a strong feeling among the employers that, in several instances, they have been forced by the unions to employ more men than is necessary. The two chief grounds for complaint are, in London, the

¹ In the inquiry undertaken at Liverpool during February and March 1930, careful observations were kept of five morning stands every day for four weeks. During that period no cases of actual shortage were reported, but surpluses of two and three hundred per stand were common. Over the same period, returns for all the stands in the registration scheme showed a shortage on ten days, the maximum shortage being fifty-six (see Hanham, pp. 67-69).

number of men per ship's gang, and, in Liverpool, the regulations governing the weight per sling according to the number of men employed.

In London the usual practice is to have twelve men per ship's gang, working with a crane or winch. The Wharfingers' Group Joint Committee have a rule to this effect, and the ocean ship-owners, though refusing to accept the principle, generally observe it in practice. The wharfingers state that this number is unnecessarily large, and that often five or six men would be adequate for the work. The following instance regarding the discharge of oranges was given as an example :

“ A case of oranges is tied round with a rope. A number of hooks are lowered down from the cranes, and the men have only to hook these round the case of oranges, yet, out of a gang of twelve men, it is insisted that ten men go into the hold and hook on this case. Four or five men are the most who can work with safety. The work is extremely easy, and the rest of the gang simply sit about.”

The question of overstaffing is also raised in Liverpool, but from rather a different angle. There the number of men in the hold is fixed according to the weight per sling for a fall. With eight men below, the limit of weight for bag cargoes is 8 cwt., “ a rule which would seem to have been framed to safeguard the men below from handling too great weights, but without regard to the possibilities of speeding up on the quay.” A firm which handles consignments of soda ash and sulphate of ammonia finds that, with this upper limit allowing only four bags per sling, 140 bags ex quay can be stowed per hour, whereas 200 bags of the same weight can be stowed ex flat in the same time. They believe that, with proper organisation and rest pauses, the eight men below could deal with six bags per sling without difficulty. Another firm points out that, if a crane is used, the maximum load is 18 cwt., and this is worked with only two extra men in the gang. Ten men to 18 cwt. they feel is reasonable, but eight men to 8 cwt. is not.

Difficulties with regard to staffing also arise as a result of demarcation barriers which are found in certain sections of the docks. In London, apart from the successful monopoly established by the crane drivers, the chief

trouble concerns the transfer of men from ship to shore and vice versa. On the wharfingers' side of the port there is an agreed rule which runs as follows :

“ Men are to transfer their labour from—

Ship to shore,
Shore to ship,
Ship to ship, and
Hold to hold,

as may be customary.”¹

The employers state that “ in some places the men absolutely refuse to transfer from ship to shore, and in others they say that none of these transfers may take place during overtime hours. That was never contemplated when the rule was drawn up. . . . We have asked them to honour their agreement, but they consistently refuse to do this where they are strong enough.”

A similar difficulty arises with regard to the movement of men from wharf to wharf. A company which owns several adjacent wharves has a permanent staff of some 800 men, who are paid weekly and are entitled to a week's notice. If some of these men at one wharf are idle, the union will not allow them to be transferred to another wharf where extra labour is needed ; instead the company has to engage additional men.

Cases similar in nature are reported from other ports. In Liverpool the ship' gangs or stevedores are regarded as distinct from the dock labourers on the quays. Originally there was a difference in the rates of pay, but now both classes receive 11s. 2d. per day, and much of the work is common to both trades. Nevertheless, as the following instance shows, the union persists in retaining the strict line of demarcation.

“ We had a case recently in which one stevedore did some work on the quay which was essentially a dock labourer's job. We were short of men on the quay to do this work, so we thought there was no harm in getting a stevedore to do it. The stevedore had nothing else to do at the time, and the job was a very

¹ Wharfingers' Group Joint Committee, Working Rules and Conditions, 10 (c).

simple one which anyone could do. The man did the work with a very bad grace.

"The next thing that happened was that the union brought the matter up. We contended that, as we were employing the man and paying him, we ought to be able to employ him on any work we wanted doing. Eventually it was decided that this particular job was recognised in the port as a quay man's job, and that we should not again employ a stevedore to do it. . . . It does not seem to us at all unreasonable to ask a man, whom you are paying, to do any simple job which you have available."

B. Hours and Wages. As was indicated earlier in this report (pp. 91-92), a number of the existing agreements in the industry contain conditions which the employers regard as onerous, but regarding which they find it difficult to obtain any modification. This applies particularly to conditions regulating hours and wages. It is not so much the general principles to which the employers object, as the way in which the slightest departure from the normal routine is penalised. The position was aptly summarised by a leading employers' representative :

"We do not complain so much of our operations being directly hampered by union restrictions as of the system of making additional payments for any slight deviation from the normal working, which has been gradually forced upon us by the unions, and which has the indirect effect of preventing work being performed outside the ordinary hours owing to its prohibitive cost. Also, owing to certain minimum periods for which payment has to be made, it frequently happens that wages are paid for which no work is performed."

The official working hours fixed by agreement with the trade unions are : from 8 a.m. to 12 noon, and from 1 to 5 p.m., daily ; and on Saturday from 8 a.m. to 12 noon. The unions argue that it should be possible to arrange all normal work during these periods as in a factory, regardless of the very different conditions obtaining in the docks. They, therefore, endeavour to secure a rigid observance of the agreed hours by making any alteration or extension both difficult and expensive.

Not only are the normal working hours fixed, but it is

agreed that men can only be engaged at the recognised calling-on times, and, once engaged, must be paid for a minimum of four hours. These regulations mean that an employer often has to pay for "dead" hours, i.e. hours during which no work is done. The following examples illustrate this point.

"It sometimes happens that men engaged at 8 a.m. finish work at, say, 1.30 p.m. In these circumstances we have to pay for 8 hours although the men work only $4\frac{1}{2}$ hours."

"If men are required to commence work at, say, midnight (other than cold stores), they must be taken on eleven hours earlier (1 p.m.) and paid appropriate day and overtime rates for this period although no work is performed." (London.)¹

"If men are required to start work at 2 p.m. on Sundays, they have to be paid "dead" hours from 8 a.m. If work proceeds after 10 p.m., say to 12 midnight, payment has to be made for the "dead" hours up to 7 a.m. the following morning." (London.)

In the same way the working of overtime, apart from the extra payments involved, is made difficult. In the ocean shipowners section in the Port of London, overtime may not be worked after 7 p.m. except on payment of overtime pay to 7 a.m. the following day, irrespective of the time of actual finish of work before 7 a.m. The only exceptions are chilled meat steamers and vessels sailing before 5 p.m. the following day; in these cases overtime may be worked up to 10 p.m. with payment according to the number of hours actually worked. On the wharfingers' side overtime is not permitted after 9 p.m. except in similar circumstances. Again, dock labourers will only work on Saturday afternoons provided the ship is required to finish loading or unloading to catch the tide. The serious results of the rules illustrated by these examples is apparent when it is remembered how greatly the industry is affected by the vagaries of the weather. Fogs, storms, and tides may throw the most careful time-table out of gear, and the

¹ At Liverpool, men have to be taken on at 1 p.m., but are only paid from midnight with a minimum payment of 6 hours at double rates.

employers would welcome a greater elasticity to meet these emergencies.

The Shaw Report fixed the minimum wage for both time and piece workers at 16s. a day. Since then, as the cost of living has dropped, there have been reductions, and the figure now¹ stands at 11s. 2d. For the most part, employers do not complain that the rate is too high, rather they take the view that what hampers them is the onerous system of extra payments which was established during and after the War, and which they have failed to get modified. They believe that they have ground for asking for a revision of conditions relating to the "differential," to piece work, and to overtime rates.

"Differentials" are found in most ports, but generally speaking they bear some relation to the nature of the work performed. The chief objection to the payment comes from the London shipowners who find themselves compelled to pay a "differential" which is determined not by the nature of the work but by the fact that the employees concerned belong to a particular section within the port. Some time ago, before the Port of London Authority was set up, these employers obtained from the old dock companies the right to discharge their own ships. In order to attract to themselves the best labour they offered a penny an hour above the ordinary rate. They have never since been able to get rid of this extra payment. The "differential" was fixed after Lord Shaw's Report at 1s. 6d., so that the ocean shipowners to-day pay a daily rate of 12s. 8d. instead of 11s. 2d. The employers admit that they are themselves to some extent to blame in agreeing at the time, but they feared the consequences if they did not. They contend that there is now no justification for the extra payment, since the work is no harder than other dock work, and they see no reason why they should be saddled with such a levy.

The extent to which piece work is adopted in the ports necessarily depends on the nature of the cargoes being handled. It cannot be applied, for instance, to mixed cargoes or to those which require exceptional care in handling. To a greater or less extent the system is in operation in all sections of the Port of London, but there is no uniform table of rates for the whole port.

¹ November 1933,

The wharfingers state that on their side of the river about 80 per cent of the discharging overside is done on piece-work terms, but there is no piece work on the quay. There is an elaborate agreed scale of charges for loading and discharging of "overside" cargoes to and from deep sea vessels, and to and from short sea trade vessels. By mutual agreement the existing rates were reduced by 7 per cent in January 1932. Nevertheless, the employers hold that the rates are still abnormally high. They state that there is a tacit understanding that they should be fixed so as to produce, on an average, about 75 per cent above the day rate, whereas in other industries from 25 to 33 per cent is usual. The rates are not uniform, and some produce an even higher percentage. "In many of our piece rates the rate is so high that where the day-work rate is 1s. 4½d. an hour the piece-work rate averages from 5s. to 7s. an hour. Some of our men often earn £2 in a single day, and all our attempts to get these high rates modified, coupled with an offer on our side to put the low rates up, have failed."

These high rates are not confined to the wharfingers' side. They grew up haphazard during the War, and it is only recently that any real attempt has been made to secure some kind of uniformity. In December 1931 the ocean ship-owners' group came to an agreement with the Transport and General Workers' Union, and other interested unions, as follows :

"The following arrangements shall apply in connection with London ocean ship-owners' piece-work rates :

"Detailed settlement to be negotiated on the following basis :

"Rates yielding not more than 75 per cent over day rates to be reduced by 5 per cent.

"Rates yielding more than 75 per cent over day rates to be reduced by 10 per cent.

"Any low rates and high rates to be considered specially."

In accordance with this agreement, a piece-work tariff has been established. The employers are grateful for the tariff as far as it goes, but they would prefer to see established the principle of a definite percentage yield over the

day rate. At present many of the rates are still based on the old figures, which grew up indiscriminately without regard to the day rate.

On Merseyside the main trade is in mixed cargoes, and piece work is practically confined to the discharging of full sugar cargoes. It has not proved an unqualified success, since there has been an attempt by the men to limit output. Some years ago they obtained a concession whereby a bonus was paid for all sugar discharged in excess of 220 tons per day. Actually 220 tons proved to represent the normal result of about six hours' work, and the bonus came to be simply an extra charge. Many employers found it cheaper to discharge the men when 220 tons had been unloaded, with the result that the system can hardly now be termed piece work in the strict sense.

Overtime rates and conditions are a matter on which the employers in the dock industry feel strongly. "One of our greatest bugbears"; "Overtime rates in certain sections are scandalous"; "We are very severely handicapped by unreasonable rates for overtime,"—such remarks were a common feature of the inquiry, indicating a widespread belief that existing overtime regulations are seriously hampering the efficiency and progress of the industry. Employers representing different sections of the industry were anxious to supply instances showing the heavy burden which the rules impose upon them.

These examples may be roughly classified under three heads: short-period overtime, i.e. work proceeding after 5 p.m. in order to finish a particular job; night work; and Sunday work. Each section has rules governing the payments to be made for such work, and, while these may show slight variations, the same contention is advanced in every case—namely, that the unions are determined to make the working of overtime as difficult and as expensive as possible.

In shipping operations it is not always easy to knock off work at five o'clock exactly. A ship may be delayed in reaching port, but she has to leave again according to schedule, and if her cargo is not fully loaded by five o'clock she may not be able to afford to wait till next morning and, perhaps, lose the tide. In such circumstances overtime is essential, probably through no fault of the employer. It may be that only a ton remains to be loaded—say a quarter

of an hour's work, yet for that quarter of an hour's work men employed by the Port of London Authority or the wharfingers would be entitled to an hour and a half's overtime pay; that "would cost us 18s., which is between ten and twelve times as much as we get for the job." The explanation is that men working after 5 p.m. are entitled to a tea hour to be paid for at the ordinary overtime rate, or at double rate if worked through. The same rule applies in the ocean ship-owners' section.

Another instance of the penalising effect of failing to finish a job strictly up to time is provided by an example from the wharfingers' side. Overtime at time and a third is permitted in that section up to nine o'clock, or to ten o'clock to finish a ship. If any work is done after 10 p.m. the men must be paid as though they had worked continually until seven next morning. "We had a case quite recently where ten tons of cargo were discharged from a ship after ten o'clock at night, which took roughly half an hour. For the ten tons of cargo the wages we had to pay amounted to £12 6s., and all we received for unloading the whole cargo was £2 10s." The same rule operates after eleven o'clock in other sections. Further it must be remembered that the whole gang has to be kept on, though only a few men may be needed, and that they cannot be transferred to another job, if one is waiting.

In Liverpool the arrangement is rather different, but the employers do not find it satisfactory. Overtime for the first half-night is at the rate of time and a half; "that is to say, we get four hours' work for six hours' pay." "When Sir Alfred Booth brought in his clearing house scheme in Liverpool, there was an agreement that the day should finish at five o'clock, and if we were going to work any overtime the men were to knock off for one hour, and the work had to start at six and go on until ten o'clock, which was four hours, for which they were to get six hours' pay. The very first night after signing the agreement, the men point blank refused to go off for their tea. They wanted to get their meal out of the employer's time, and have a break of about twenty minutes . . . the present practice in Liverpool is to carry on and allow the men to go off for about twenty minutes. This is really a very bad thing from the point of effective work. The first hour or hour and a half is more or less wasted time because the

work is not properly manned, and the work cannot go on as it should do, if the full gang is not working."

As has been indicated, hourly overtime is possible in the Port of London in certain circumstances up to 10 or 11 p.m.—that is, for the first half-night. If men kept on for the first half-night work after these hours they are entitled to pay at overtime rates as though they had worked through till seven the next morning. These rules also apply for all night work as far as employees of the wharfingers, the short sea traders, and the Authority are concerned. If, in any of these sections, work continues after 10 p.m., then the men must receive a minimum payment of nine hours at overtime rates. Also there must be a break from 9–11 p.m. for supper, and, except in the case of the Authority, an hour's break for breakfast. In the wharfingers' section the nine hours minimum only applies if the man is paid off at or before 2 a.m.—otherwise the minimum is ten hours. In the case, therefore, of a man who is employed on a ship at a wharf after 10 p.m. and the ship does not finish loading before 2 a.m., the minimum payment he must receive is, at present rates, 21s. 1½d., and the maximum amount of work that the employer can get from him is seven hours. It will be less than seven hours if the job does not last until 7 a.m. The parallel day rate for eight hours' work is 11s. 2d.

In the ocean ship-owners' section the rules provide for a combined tea and supper break from 8–11 p.m., and for minimum payment as follows: "Fourteen hours from 5 p.m. if paid off at or before 2 a.m., viz. 29s. 6½d. (transport workers only); fifteen hours if paid off after 2 a.m., viz. 31s. 8d. (transport workers and stevedores). The employer is in the position that he cannot, with certain exceptions, work overtime after 7 p.m. on an hourly basis. He must pay the minimum all-night rate—that is to say, "irrespective of the number of hours worked up to seven o'clock the following morning, the worker is paid fifteen hours at overtime rates; that is, from 5 p.m. in the afternoon to seven the next morning. If a man is going to work overtime after 11 o'clock, then he is off from eight until eleven; that is, three hours, which are called meal times, so the actual working is from 5–8 p.m.—three hours, and from 11 p.m.—7 a.m.—eight hours making eleven hours' work for fifteen hours' overtime pay. This latter, of course,

includes an extra hour for breakfast, which is paid for." With such conditions, the employers do not find it surprising that men should try to spin out work to come within the all-night rule, but they do feel that they are justified in speaking of "the prohibitive payment we have to make for overtime."

Night work at Liverpool is on a different basis. As has been shown, overtime can be worked after 5 p.m. up to 10 p.m. at the rate of time and a half. If it is continued until eleven the rate is time and a half from 5 till 9 p.m., and treble time from 9 to 11 p.m. Provision is also made for a night-shift commencing at midnight and lasting till 6 a.m. The rate is double time. "If there is only one hour's work to be done, the men still have to be given twelve hours' pay. A thing of this kind would, no doubt, be a very isolated instance. It would not, of course, be very outrageous to have to pay double time for night work if you had sufficient work to carry the men through the night." The trouble is that overtime in the docks cannot often be arranged to fit set hours, and is therefore more costly than at first sight seems apparent.

Throughout the industry it is agreed that week-end overtime is undesirable. Consequently, where it is inevitable, special rates of pay are generally in operation. In the dock industry the position is defined in the national agreement of May 5th, 1920, as follows :

" 3. Week-end overtime shall be paid as follows :

- (a) Saturday afternoon 1 p.m. to 5 p.m.¹—ordinary overtime rate.
- (b) Saturday 5 p.m. to midnight Sunday—double time at day or overtime rates as the case may be.
- (c) Sunday midnight to ordinary starting time Monday—double day rate, except for 6 a.m. starts, for which ordinary overtime shall be paid, and except for work on perishable cargo in London, for which a special rate will be agreed locally.

" 4. Where, under existing conditions or rules, overtime is paid on a higher rate or calculated on a higher basis than the foregoing, such higher rate or basis shall be maintained."

¹ Altered to 9 p.m. by the agreement of December 9th, 1931.

Since 1920 the actual rates paid for week-end overtime have been adjusted to meet alterations in the ordinary day rate, but the principles on which they are calculated remain the same. The instances given herewith are calculated according to the day rate as revised in January 1932 :

In the ocean ship-owners' section a midnight start on Sunday means 3*s.* 2*d.* an hour for eight hours, i.e. a minimum guarantee of 25*s.* 4*d.*

The wharfingers and short sea traders are also bound to pay a minimum of eight hours. For a Saturday midnight start the guaranteed minimum is : ship, 83*s.* 9½*d.* ; quay, 29*s.* 9½*d.* ; and, for a Sunday midnight start, ship, 25*s.* 4*d.*, and quay, 22*s.* 4*d.*

The ordinary day rate being 11*s.* 2*d.* per day on ship, the Sunday day rate would be 22*s.* 4*d.*

The second of the clauses quoted from the national agreement shows that week-end overtime may cost more than double ordinary rates. Cargoes of perishable goods or frozen meat must, owing either to their nature or to the demands of Monday markets, be unloaded on Sunday. In some cases where Sunday work is a long-established practice the rates are substantially higher, and a man may earn over Saturday and Sunday as much as a full week's ordinary pay. Again, in Liverpool there is an old tradition that dockers cannot work between eleven and one on Sundays because of divine service. Therefore the actual day hours worked are six—from 8–11 a.m. and from 1–4 p.m., but there is no corresponding reduction in the wages due.

The examples given in the preceding paragraphs show the increase in labour costs which is bound to follow any departure from the normal working hours. The employers claim, however, that these figures represent the very minimum that they will have to pay, and that often the cost is substantially higher. In addition to the heavy overtime payments, there are three rules which, in their opinion, burden still further an industry whose dependence on the weather makes a measure of elasticity in working conditions essential. In the first place, as has been shown, they are obliged to engage men at one of two recognised call hours ; secondly, if overtime is necessary, the whole gang must be kept on ; and thirdly, once the job on which the men are engaged is finished, they refuse to be transferred

to some other work for the remainder of their time. By reason of the operation of these rules, the employers find themselves saddled with payments which amount in full to considerably more than the agreed overtime rate if calculated solely according to the amount of work actually performed.

Take, for instance, the case of an ocean ship-owner with a vessel approaching harbour, and expected to berth about five or six that evening. If he wishes to work her that night he must engage and *pay* his labour from 1 p.m., because there is no call time after that. If his vessel arrives to time, this "dead hour" will amount to a half-day's pay plus, perhaps, an hour's overtime. If she is delayed, as by fog, there will be several hour's overtime pay due, and he cannot employ the men on other work in the meantime. Finally if, owing to the initial delay, he has not finished discharging, as he had hoped, by 5 p.m. next day, he may find that there is, perhaps, half an hour's work still to be done. He must keep on the whole gang, whether he needs them or not, and he must pay them a minimum of two hours' overtime.¹ Again if a London employer requires men to start work at midnight, he must engage them eleven hours earlier, and pay them appropriate day and overtime rates although no work is performed.

Restrictions such as these, when added to heavy overtime rates, make any deviation from the normal working hours an expensive and difficult matter. Several employers stated that they had had to refuse work because they knew that, under existing conditions, it could only be done at a loss. The opinion was expressed that, "owing in some cases to trade-union action, the number of ships discharging in the Port of London has been very materially reduced." Nevertheless, the employers have failed to secure any real modification in overtime rates and conditions.

C. Other Conditions affecting Output and Efficiency. The chief points on which employers in the dock industry desire a change in existing conditions have been enumerated. Union action in restricting output, which is an

¹ This example is drawn from London. In a similar case in Liverpool the labour would have to be engaged at 1 p.m. but pay would commence at 5 p.m., and, if it were necessary to work a short time after 5 p.m. the next day, the gang could be reduced to the number of men necessary to complete the operation.

important factor in some trades, is not one of the problems of the docks. Where piece work is in operation the employers state that the variations in earnings dispose of any suggestion of a concerted attempt to limit production, and, while the time workers' standard leaves something to be desired, it is the over-staffing forced upon them by the unions, rather than deliberate under-production, which constitutes their problem.¹ There are, however, a number of matters affecting particular aspects of the industry which deserve notice, but which do not lend themselves to classification under the preceding headings, and these are set out below.

With regard to the question of the displacement of men by machinery, an employer's representative in the Port of London made this statement :

“ The unions maintain that the advantages from the introduction of machinery should be labour aiding, not labour saving, and this attitude has to an extent limited the benefits derived from the installation of such machinery.”

No examples were given in illustration of the statement as far as London is concerned, but relevant information was received from another port with regard to a special aspect of the question.

The port in question is concerned very largely with the export of coal, for which a special class of dock labourers are employed—the coal trimmers. A great deal of the work is now done by machines ; nevertheless, a strong union has been able to obtain very good terms for the men, and they are still paid according to the amount of coal actually shipped, though they may handle only a small proportion of it.

“ In the case of a self-trimming boat, the coal trimmers get $1\frac{1}{2}d.$ a ton for all the coal shipped, though they do very little actual work. In cases where two kinds of coal are wanted in a hold, the cost is very high. Where you have to make a separation, you have to pay $2\frac{1}{2}d.$ a ton for levelling what is already in the hold. The hold may be three parts loaded, and very little coal is touched when it is levelled, but we have to pay $2\frac{1}{2}d.$ a ton on all of it.”

¹ See *ante*, pp. 95 ff.

An example was given of the introduction of a new device which caused considerable trouble. It is often difficult to get washed coal out of the waggons, and it has to be dug out. The men were paid 2*d.* a ton for this digging, and then a machine was invented for scraping out the coal, and the men were offered $\frac{3}{4}$ *d.* a ton for working it. This they would not accept, and finally compromise terms were agreed as illustrated in the following example :

“ Take the case of loading an 8,000-ton coal boat. The trimmers have first of all to manipulate the rope and to fix a box arrangement, which is a device to avoid breaking the coal. The South Wales coal has to be shipped in large lumps ; if it is broken up it is of little use. Therefore the box device is essential. The trimmers are paid at the rate of $3\frac{1}{2}$ *d.* a ton, less 40 per cent for the whole 8,000 tons. The trimmers will not have to shovel as much as 1,000 tons out of the 8,000 tons.

“ To coal this 8,000-ton boat, there would be a shift of eight men on the Wednesday morning, a further shift of eight men on Wednesday night, the same two shifts on Thursday, the same on Friday, one shift on Saturday, and two on Monday, making nine shifts in all. At $3\frac{1}{2}$ *d.* per ton, less 40 per cent, this would be equivalent to a rate of 19*s.* 5*d.* per man per shift. It is estimated that on these nine shifts the men would have to work altogether for about thirty hours out of a possible seventy-two.”

Another class of workers who have obtained preferential treatment for themselves which the employers feel is unjustified are the dockers who handle frozen and chilled meat. During the War the men unloading frozen meat established the principle that they should work one hour on and one hour off, being paid for both hours. This is regarded as unreasonable, as it does not apply to workers in cold storages. In some ports the principle has been extended to chilled meat, which the employers criticise even more strongly, since the temperature there is 32°F.

Finally, in several cases, reference was made to the fact that certain classes of men had established what are virtually close corporations, and are in consequence difficult to deal with. They consider that, to some extent, they stand apart from the general working agreements,

and there is always the danger of a sudden strike of one of these small sections dislocating the normal working arrangements. Such groups are the coal porters, the deal porters, and the lightermen.

Though the lightermen form a comparatively small section of labour in the Port of London, they occupy a position of importance out of all proportion to their numbers. It is estimated that at least 80 per cent of the goods handled in the port are removed by lighters from the place where they are discharged. The lightermen are in a key position, and can, if they wish, hold up the whole organisation of the port. Their position is the stronger because they are very closely organised, and have won for themselves a monopoly of this type of work. The employers believe that lighterage service could be both cheaper and more efficient, but they have failed to break down the exclusive monopoly of the Watermen, Lightermen, Tugmen and Bargemen's Union.

In the opinion of the employers, the lightermen have taken advantage of their key position to establish conditions of work which are unduly costly. They cannot admit that there is any justification for fixed hours of daily work in a trade which is dependent upon the rise and fall of the tide for its operations. The working day is from 8 a.m. to 5 p.m., and there are special rates for "long" and "short" nights, as well as an ordinary overtime rate of time and a third. The employers complain that these conditions are even more onerous than they appear by reason of the "continuous overtime" rule,¹ and a further rule that a fresh man—one who has not worked during the day—"cannot be engaged for night work unless he is paid for the day preceding the night in question, and is also guaranteed full pay for the succeeding day whether there is work for him to do or not." For example :

A barge that has been idle all day is at Lambeth on Tuesday, and is required to be placed alongside Fishmongers' Hall Wharf, London Bridge, say at 9 p.m. that evening, a distance of some three miles. The ebb tide serves at 6.30 p.m. The lighterman calls at his

¹ "(a) When night work follows on from day work, overtime is continuous. (b) When day work follows on after a long night, overtime is continuous."

employer's office at 6 p.m. that evening and receives instructions to be at Lambeth at 7.30 p.m. to take the barge down the river. This engagement entitles him to :

	<i>s.</i>	<i>d.</i>
One day's pay for Tuesday (not worked)	11	2
Overtime from 5 p.m. to 8 p.m., three hours, at 1 <i>s.</i> 10 <i>d.</i>	5	6
8 p.m. to 9 p.m. (when finishes), i.e. short night	6	8
Guaranteed day's pay for Wednesday, whether work available or not	11	2
For one and a half hour's employment	34	1

The example is admittedly extreme, but it is advanced to show what is possible under the existing rules. In practice, such orders would be given to a man who had been on pay the previous day so that the payment of 34*s.* 1*d.* would in effect be for up to 9½ hours' work. Even so, assuming that the order was for the lighterman to be at Lambeth at 5 a.m. on the Wednesday morning, he would be receiving pay for between 5 p.m. Tuesday and 5 a.m. Wednesday—that is, continuous overtime from 5–8 p.m. and then a long night—during a considerable part of which time he could and would be sleeping in his bed.

The other rule which the employers consider imposes a heavy handicap is that no lighterman shall do more than one job during the night (any work to be done in one barge to be a job within the meaning of this rule). This can prove very costly, as the following example shows :

Assume that the same master lighterman has a second barge at Fishmongers' Hall Wharf which he wants shifted from the wharf to alongside a steamer lying at Hay's Wharf a few hundred yards below and across the river.

The lighterman who has brought the same owner's barge from Lambeth cannot be employed to shift the other barge, because of the rule that no lighterman shall do more than one job during the night. Accordingly the master lighterman, if employing a fresh man, will have to pay the fresh man similarly for the shift of his

second barge from Fishmongers' Hall Wharf to Hay's Wharf as he did the first barge from Lambeth to Fishmongers' Hall Wharf.

III. THE TRADE-UNION REPLY

The history of the organisation of labour in the dock industry is a remarkable story. It had always been difficult to persuade casual labour to combine, and the conditions under which the docker lived and worked in the latter half of the nineteenth century were so appalling that he could not be expected to have thought for anything else save warding off starvation. Nevertheless, the incredible happened. In 1886, Ben Tillett set his energies towards organising the dockers, and three years later occurred the strike which proved to an astonished world how successful he had been. When the great dispute over the "dockers' tanner" began, the union had but a small membership, and its funds amounted to precisely 7*s.* 6*d.* Yet the leaders succeeded in holding up the whole work of the Port of London. Public sympathy was aroused to an amazing degree, and at the end of a month the employers were forced to give way all along the line.

The "dockers' tanner" is ancient history now; but the memory of that great fight by which astonished and frightened employers were forced for the first time to take cognisance of the disgraceful conditions under which their employees were condemned to exist is still a powerful force. Just as it provided the first impetus towards permanent union among the dock workers, so it has continued to influence the minds of the men and to inform the philosophy which now characterises organised labour in this industry. In the reasoned and logical arguments which the dockers put forward to justify their attitude on labour problems they admit frankly that they have borrowed from the employers, and the latter, by their attitude in the past, have contributed materially towards the formation of that implacable opposition which adds to their difficulties to-day.

The kernel of the arguments set out by the dockers' section of the Transport and General Workers' Union is that they have a commodity to sell. "We are selling labour, and we are simply following the example of the

big business men and getting the best price we can." The leaders feel that in the past they sold their labour too cheaply; consequently, when any point of working conditions comes up for discussion, they start from the premise that now it is the employers' turn to pay. "Further, we say that if there was a close examination of the capital structure of the various companies represented by the dock employers and the return they have received, and then a comparison made between the proportion of the spoil obtained by the workpeople and that obtained by the employers, it would be shown that there are millions of pounds still owing to the workpeople."

Moreover, the dock leaders are convinced that the employers have no justification for asking for concessions at this juncture. It is the workers, not the capitalists, who are suffering from the economic depression and the shrinkage in trade. At the same time that the volume of employment available for dockers has been steadily diminishing, the capital resources of the companies have been appreciating. "As an example take Company 'A' whose capital, without making any public issue, has jumped from something like £40,000 to £400,000 since the beginning of the War, and throughout the whole of this period the dividend has not dropped below 10 per cent. The best example is Company 'B' which for about ten years running has paid 6 per cent plus a 50 per cent bonus each year. In other words, they increased their capital by 50 per cent each year."

It is on these arguments that the dockers rely to prove their contention that the employers are taking a greater proportion of the profits of industry than their contribution towards its output warrants. "We are prepared at any time to take the capital value of the companies for an agreed period before the War, and the value of their tonnage as compared with their total capital, and make the same comparison for post-War years. . . . We feel sure that what the figure would teach us would convince the workers against doing any more work at the existing rates of pay." Methods of production have been improved, new machinery introduced, and the rate of production speeded up, but the person who has profited is neither the worker nor the consumer, but the capitalist. "Our regret is that our predecessors in this job did not keep records such as we keep.

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If they had, I think that now we should be working for somewhere in the neighbourhood of £2 a day because of the extra work the men are doing when measured by pre-War standards."

In the opinion of the unions, the time for some readjustment is long overdue. A proportion of the profits which have been derived from the exploitation of casual labour should be returned to the industry and applied to relieve the burden of economic insecurity under which the workers have suffered so long. The dockers consider that the industry should accept responsibility for its employees, and they have put forward a scheme to the Port Labour Inquiry Committee with this end in view. They suggest that the present system of unemployment insurance, as applied to the docks, should be terminated. Instead, every registered docker should be entitled to a maintenance payment of 50s. per week, this payment to be reduced by the amount of money each man earns during the week. The men would be under obligation to attend regularly at the call stands, since they would be employees on a regular weekly basis. Actual employment, by the nature of the industry, must be subject to fluctuation, but the organisation and distribution of labour could be greatly improved, while the difference which some measure of security would make to the dockers' standard of living and outlook for the future can hardly be over-estimated.

It is, of course, obvious that such a scheme could not hope to operate successfully unless the number of dockers on the register were calculated with careful reference to the amount of work normally available. In London, when the register was first made, all those who claimed to work in the docks were admitted, to the number of some 62,000. The register then lay dormant until 1926, when the Port of London Registration Committee, consisting of an equal number of employers' and workers' representatives, began a careful review of the whole position with the object of reducing the number of tally holders. Their efforts have been so far successful that there were, in September 1933, 33,983 men on the register. This reduction has been achieved by a detailed scrutiny of the records of the tally holders, and the elimination of all those whose cards, over two years, showed that their employment at the docks was so intermittent and slight

in extent as not to justify their being regarded as regular dock workers. In addition, there has been, of course, the ordinary wastage by death, sickness, transference to other industries, etc.

Despite the stringent scrutiny of the committee, there is still a considerable measure of unemployment among the registered dockers. During the first three months of 1933 the unemployment figures varied between 6,200 and 9,800 ; so that—without making allowance for those who have secured more than a half, but less than a full, week's work—approximately 25 per cent of the dockers are unemployed. If trade improves, a good proportion of this surplus may be reabsorbed, but clearly it is-desirable that the tendency should still be towards reduction, rather than expansion. One result of this policy, however, which the union views with concern is the practical cessation of recruitment to the docks. To a certain extent this is inevitable, but a prolonged pause in the regular inflow of young labour into the industry must become progressively more serious.

The unions believe that the situation could be greatly relieved if the employers would shoulder part of the responsibility, which is rightly theirs, for the maintenance of the men over sixty. At present, the employers are trying to take advantage of the economic situation to push these men out, and, by turning them off the register, to destroy their last chance of obtaining employment. No doubt it is time that many of these men retired, but, "at the same time, it is difficult to remove them from the register unless you can give them some hope. If you have a man who has knocked about the docks for thirty, forty, or fifty years, and who may get a day, perhaps, every fortnight on the average, unless you are going to give him something equal to or better than that, you cannot condemn him to starvation on 10s. a week." If the employers would admit their responsibility towards these men, one of the most chronic classes of casual labour could be removed, and room made for younger recruits.

The system of registration in operation at Liverpool is older than that in London, but the difficulties encountered are much the same. In April 1932 there were 18,589 names on the register, which is at present being revised in the hope of reducing this figure to about 15,000. It is

estimated that the docks should be able to provide employment for approximately that number of men in any normal times, though at present not more than 9,000 are receiving wages, and some of these are getting no more than a day's or a half-day's work per week. The unions in Liverpool are assisting in the revision of the register, but they deplore attempts to force an increased output from the worker when there are so many men out of work.

A. Recruitment and Utilisation of Labour. On the general question of recruitment of labour the unions have little further to say. Regularity of employment such as they urge would obviate some of the worst features of the stand system, for the whole question is bound up with the casual labour pool which the employers find so convenient. On the particular point with regard to the crane drivers (p. 94) the union reply is that these men are in charge of very complicated machines. They do not unduly restrict entry, and they are entitled to some extra pay on account of the responsible nature of their work. The cranes which they drive may displace anything up to twenty men on one job, and the saving to the employer is very considerable. Indeed, the unions believe that some of this saving should be applied to the maintenance of the men who are displaced, "either directly, or when they reach the age when they can no longer work."

The chief difficulties of which the employers complain under this head arise in connection with matters of staffing (pp. 95-96). In the first place, they contend that they are forced to employ more men than are necessary in each ship's gang. The usual practice is twelve men to a gang, and, though the ocean ship-owners have never formally agreed to this, in most instances they have had to give way. An example was given regarding the unloading of oranges (p. 96), where no more than five or six men are needed for the work, or, indeed, can participate in it with safety.

The London union leaders do not deny that the unloading of oranges can be carried out by four or five men. The present gang of twelve men "would probably land some 8,000 boxes of oranges in the eight hours, but, although the work may be said to be easy, the output is approximately 50 per cent up on pre-War, so it is obvious that if

speed is required the number of men cannot be reduced." Before the War, eighty tons per day was a fair average output per gang, and if the men had kept to this, instead of increasing their output, "we should probably absorb 6,000 out of the 8,000 dockers to-day unemployed in London." The union is of the opinion that, since the employers are getting a 50 per cent increase in output, they "are getting full value for every penny they spend in wages. In fact they are getting too much." Therefore they cannot agree to a reduction in the number of men employed per gang.

To the unions the fundamental fact in any argument of this kind is the amount of employment available. A man employed on casual labour is not going to make any special effort to increase his output when, "in the transport industry, to a very large extent, if a man does two days' work on one day, he does not get additional work, but has to stay on the stand next day and whistle." The yearly profits paid by the companies show that they can well afford to pay a gang of twelve men at present rates of pay. During the War they used the argument of national emergency to get the men to give a greatly increased output. "Now they want them to do a post-War day's work for a pre-War day's wage, with which we profoundly disagree." The unions hold that the men are giving a more than adequate return for the wages that they receive ; to increase output any further must result in throwing still more men out of work.

The question of employment is also at the root of the answer which the unions make on the question of transfer from ship to ship and from ship to shore (p. 97). There is a rule in the wharfingers' agreement that such transfers shall take place "as may be customary." Nevertheless, the employers maintain that the men often refuse to honour the agreement, especially during overtime hours. In Liverpool the same line of demarcation is observed, though there is now no difference in the rates of pay, and much of the work could be done equally well by stevedores or dock labourers (p. 97).

The unions admit that logically there is no strong justification for a strict division between work on the ship and work on the quay. It is a matter of tradition and custom, and in London they have only preserved the distinction

where it was already well established. It probably has its origin in the system of contracting whereby men were engaged for a particular job, and paid off as soon as it was finished. If the job only took an hour, then the contractor turned off his men at the end of that period and took no more responsibility for them. Now the minimum engagement is for half a day, and the employer is anxious to get his full money's worth. The men, on the other hand, realise that, the greater number of jobs there are, the better chance there is for more men getting at least half a day's work. If a gang has a two hours' job in the hold, and then transfers to the quay, not only will an equal number of men on the quay be deprived of a half-day's engagement, but the gang themselves will get no more for their extra two hours' work than the pay to which they were already entitled. Why, then, where interchange is not customary, should the men be expected to welcome a plan whereby they give extra services free to the employer at the price of putting some of their mates out of a job?

Equally, if the men agree to transfer during an overtime period, it means that they are putting out of work men who would otherwise be employed next day. The employers argue that refusal to transfer during overtime hours was "never contemplated when the rule was drawn up," but the unions reply that this is "an absolute fabrication." Transfer of any kind, at any period, was only agreed to where it was already customary. That is obvious from the wording of the rule.

B. Hours and Wages. In regard to hours and wages, the employers do not wish to challenge the existing national agreements. They do, however, complain that they are badly hampered by the difficulties which the unions place in the way of the slightest deviation from the normal routine (p. 98). They contend that the conditions of the dock industry demand a certain degree of elasticity in working arrangements, and that the rigidity on which the unions insist is both unnecessary and exceedingly costly. In particular, regarding hours of work, they complain of the difficulties of a fixed starting and finishing time, they object to the "dead" hours payments which must result from fixed call times (pp. 98, 99), and they find the

limitation of overtime an onerous restriction (p. 99). In their opinion, greater freedom in the adjustment of hours could be granted without imperilling the principle of the forty-four-hour week.

In their reply the unions take their stand on the general principle already enunciated, that they are not prepared to agree to any concessions which may operate against the dockers' chance of picking up a few more hours' work, unless the employers in return will accept some responsibility for the maintenance of their men. So long as the employers hold to the view that the men should wait patiently on the stands, prepared either to work if they are wanted, or to be ignored if they are not, so long will the unions refuse to make concessions with regard to mobility or overtime. "It would simply mean that the employer would relieve himself of what might be termed one of his overhead liabilities by unloading upon the poor devil who is dependent day by day on casual work."

"We have never said that dock work can be organised on the same basis as factory work. We have never held that view; but what we do say is that it is possible to get a high state of organisation in the transport industry if employers would be more public-spirited, and not so concerned with extracting the maximum return that they have no time to go into the ethics of the situation." The position with regard to overtime is an excellent case in point. "There is not the slightest doubt that in 1920 the employers, feeling that the millennium had arrived, agreed to a limitation of overtime. Overtime was definitely limited to finishing a job. Now, of course, they are scrambling for traffic, and they would work the men all hours of the day and night." If the employers wish to vary the overtime agreement, they should raise the matter in the National Council. But, since an increase in the amount of overtime worked must mean that fewer men are employed in the aggregate, any proposal put forward should be accompanied by a scheme to make provision for the men who are thrown out of work. In the opinion of the unions, overtime is undesirable, and should be restricted as far as possible.

The employers complain that the existing arrangement of two fixed call times means that they are often compelled to

pay wages for "dead" hours, and they give examples to show how the system works (p. 99). The unions deny the force of this argument, and assert that "it hardly ever occurs now that men are paid for 'dead' hours." The use of wireless has so far improved communication with vessels at sea that there is usually very little difficulty in computing when a ship will berth. Moreover, usually there is no stand call at all until the ship is in the berth, since comparatively few men are necessary to berth her. An official at Liverpool stated that the last time he could remember that men were taken on and the ship did not arrive was about eighteen months ago, but such an occurrence was very rare. London officials gave the same evidence. "I have only known one instance where men have been picked up at one o'clock and stood by until eight o'clock for a shift. In the wharfingers' group I only know of two instances where they have worked into the night and were paid 'dead' hours. In the short sea trade I don't know of any instance during the past seven years."

Besides the usual call times the rules provide for a midnight start in the case of perishable traffic, and the workers are not prepared to agree to further concessions. "We have carried out a tremendous work in making dock workers respectable, and encouraging them to obtain decent conditions of life, and we cannot see why the employers should kick because we will not agree that they can have a man from any of the dormitory boroughs at any hour of the day or night when they think that they ought to have him. The individual has as much right to regulate his life as the employer has to regulate his business. . . . The whole question is bound up in—'How much money shall I save if I can get a start at ten o'clock at night as soon as the ship arrives?' Taken over a long period, the employer would probably save time and fit in extra voyages, which would yield him profits and saving of expense in which the workman does not share."

The unions do not deny that there may be occasions when payment for "dead" hours is necessary, but, with all the modern improvements in communication, such occasions should be very few. Their object in insisting on fixed call times is not to get money for nothing, but to obtain for the men such slight degree of regularity as is possible in casual work. It is quite sufficient to bring the

men to the stands twice in the day on the chance that there may be work available. To make them attend again in order to save the employers from the unlikely chance of having to pay two or three extra hours is surely unreasonable. All the liability that the employers have accepted is that the minimum period of engagement shall be half a day. This is little enough security for the men, and the Shaw Report, it should be remembered, urged that the principle of weekly engagements should be adopted as soon as possible.

On the matter of wages, as of hours, it is the difficulty and cost of any variation from the normal to which the employers object (p. 100). They express dissatisfaction with regard to the indiscriminate way in which piece rates are fixed, and would prefer that there should be some definite relation between time and piece rates (pp. 101-2). They also complain that the rates for overtime and week-end work are excessive (pp. 102-6).

Piece work, to a greater or less extent, is in operation in most sections of the Port of London. The union leaders there do not deny that there are occasions when a man can earn 7s. an hour, "but it is not 7s. per hour for a forty-eight or forty-four-hour week; it is probably for one hour standing on its own. It probably happens that a man earns 7s. in one hour and then he has no more work for three or four days." Knowing how insecure his work is, he naturally takes all he can get, but, "if he had as much sense to-day as he had before the War, he would not earn 7s. an hour, and there would be no instances of these terrific earnings which could be quoted against him."

In Liverpool the dockers do not favour piece work. It is not suitable for mixed cargoes, and has only been practised with a few commodities such as coal and salt. The union officials "suggest that the Liverpool employers are getting an output on day work equal to what they are getting in London and other ports on piece work," and they do not favour an extension of piece work on Merseyside.

With regard to high rates for overtime and week-end work, the men revert to their general argument that, given better organisation, such work should rarely be necessary. It is more than ever unjustifiable at the present time when there is so little work available, and what there is

ought to be shared among as many men as possible. The most excessive rates are probably those for Sunday work in Liverpool, which, the union admits, are "certainly heavy." Their attitude is that they do not want Sunday work; they consider it undesirable in the best interests of the men. "We wish to make it difficult and costly, so that, if possible, the employers will be forced to stop it."

C. Other Conditions affecting Output and Efficiency. The employers in the Port of London assert that the monopolies enjoyed by certain small bodies of skilled men in the port are dangerous, since these men can, by virtue of their peculiar position, often hold up the greater part of the work of the docks (p. 109). In particular they complain that the lightermen have taken advantage of their key position to establish conditions of work which are unduly costly (pp. 110-12).

The members of the watermen's and lightermen's union admit that they occupy an exceptional position on the river. They are licensed members of an old-established company, which was long ago granted special privileges on the river in return for being liable to perform certain services in time of war. Nevertheless, they contest the argument that they can "hold up the whole work of the port." Changing conditions of transport have affected their position adversely, as the experience of the strike in 1932 proved. Goods which they refused to handle were moved by road, and the work of the port was not held up to anything like the same extent as on previous occasions. "After other strikes the warehouses were full, and there were months of work day and night to make up the arrears. This time it was not so. As a matter of fact, we lost contracts as a result of the strike, and generally we have not got them back again."

The employers give an example showing that it is possible for a man to receive 34s. 1d. for one and a half hours' work, but they admit that this is an extreme case. According to the union, "it would not happen once in a hundred times." The real application of the continuous overtime rule is where night work follows on from day work or day work from night. Take, for instance, the case of a man who finishes his day work at London Dock at 5 p.m., and receives orders to be at Millwall after 8 p.m. for a night

job. If the continuous overtime rule were abrogated, as the employers desire, the man would be put off pay between 5 p.m. and 8 p.m. though he would have to travel, to get food and generally to hold himself in readiness to suit his employer's convenience. "The Watermen and Lightermen's Union is of the firm opinion that once a man is off pay he is under no obligation whatsoever to the employer to start a fresh contract. We hold that it is against the common rule of the hired and the hirer for an employer to expect a man to hold himself in readiness for work at any hour during the night, and yet not to pay him continuously. We hold that it is tantamount to retaining the services of a man without pay."

The question of "fresh starts" is also raised by the employers in this connection (p. 111). The lightermen take their orders in the evening from 5 to 6.30, and a man who is required for a job that night must have been paid for the day whether he has worked or not. Employers naturally when possible give the night work to men who have been working during the day, but, if they had only the night job to pay for, they would engage a fresh man and thus avoid continuous overtime. In reply the union wishes to make it quite clear that their insistence on the rule is not due to a wish to receive a day's pay for which they may not have worked. "On the contrary, men have refused to go to work at night although the employer has offered the day's pay and overtime. The reasons why lightermen will not take night orders when they have not been at work during the day are: (1) The arrangement for applying for orders in the evening is mutually convenient to both masters and men. (2) Taking of orders in the evening is tantamount to receiving them in the morning, as other dock workers do. (3) The present plan leaves the men free to make arrangements for their hobbies and pastimes, whereas, if the employers had their way, the men would be liable to be called upon without any proper notice."

It must be remembered that the lightermen's position is in many respects exceptional, and special rules are therefore necessary. They work on contract, and, owing to the special nature of their work, they cannot have set meal times, nor a half holiday on Saturday. They are the lowest paid of the dock workers—for instance, their pay

for a full night is 21s. 7d., whereas other dock workers receive 31s. 8d. for the same number of hours. Their work is both responsible and very varied. A lighterman serves an apprenticeship of from five to seven years, and he must be prepared to do any dock worker's job "such as lading, tallying, cargo-surveying, navigating, and others too numerous to mention." All these factors have to be taken into account, and have their bearings on the special rules which, in the opinion of the union, are necessary and justified.

Finally, changes in these rules would be bound to increase unemployment, and that problem is already sufficiently serious. Though barges have become bigger, and the amount of cargo carried much greater, the men have not complained, but have continued to work them with the same staff. If further sacrifices are to be made, then both sides should participate, and it is an established fact that the companies have been increasing their capital and paying large dividends. The lightermen's union believes that "this is all for the better for the industry," but they also believe that it is their justification for refusing to make one-sided concessions.

In general, it must be emphasised again that lack of security is the boggy of the dock worker. Except in a small minority of fortunate cases, he can rarely reckon on more than a day or two's work at a time. It is often impossible for him to plan his life a week ahead, since he cannot estimate with any certainty when he will be employed, if at all, or what he will be able to contribute to the family budget. Of recent years the advance in machinery and speeding up in production has led to a reduction in the number of men required, and has forced upon the docker even more clearly the insecurity of his position. Behind all the arguments advanced by the unions is the fixed determination to make no concessions which may in any way operate to increase the uncertainty in which the men live. They believe that for many years the profits of the industry have been derived from the exploitation of the men, and they are out for a radical reorganisation which shall render such things impossible in the future. One of the first principles of their creed is that an industry should be responsible for the maintenance of its workers, and they are pressing resolutely towards that end.

IV. SUMMARY

There is little dispute between the employers and the unions on the general proposition that working conditions in the docks could be altered to promote greater efficiency. The employers put forward a very strong case showing that the conditions governing overtime, night and Sunday work, the distribution of labour, and piece-work rates impose a heavy burden, and they support their arguments by cogent examples. Apart from one or two points, such as the extent to which payment for "dead" hours is an actual occurrence, the unions do not call the employers' statements into question. They admit that the conditions complained of—which were established by mutual agreement—have a restrictive effect, but, in the present circumstances, they are not prepared to make any concessions.

The arguments of the unions are based on the general principle that an industry should accept some measure of responsibility for its workers. The whole history of the dock industry, they contend, shows that the employers have consistently refused to do their duty in this respect. Improvements in working conditions have only been conceded after bitter opposition, and the condition of the docker is still far too precarious for him to consider any concessions until the employers have given convincing proof of a change of heart.

In regard to the conditions which the employers desire to alter, they themselves agreed to their institution. The employers state that they were concessions granted during a period of abnormal prosperity, and that later experience has shown that they are too costly for the industry to sustain. This the unions deny, and state that they are prepared to show that the financial state of the industry is such that the employers could afford to do more, not less, for their employees.

To the unions the essential factor in any consideration of working conditions is the lack of security which is an ever-present menace to the docker. Any concession which results in an increase in output, in easier facilities for overtime, or in the lowering of demarcation barriers, reduces the chances of employment. It is difficult to deny the truth of the statement that "in the transport industry,

to a very large extent, if a man does two days' work on one day, he does not get any additional work, but has to stay on the stand next day and whistle." It appears to the investigators that much of the employers' case is vitiated by their continued adherence to the "pool of casual labour" and the "stand system" which were so roundly condemned in the Shaw Report.

During their inquiries they attempted to discover from the employers how far conditions had been improved in these respects since 1921. As regards the Port of London, they were informed that a registration scheme was established in 1924, when every man who "was generally earning his living at the docks was given a registration tally, and London employers undertook only to employ men holding these tallies." The number of tallies originally issued was 65,000; by September 1933 the number in circulation had been reduced to 33,983. These figures were advanced to show that an appreciable advance has been made in dealing with the problem of casual labour in the port.

The bare figures do not carry a great deal of conviction. Obviously there was a serious over-issue in the first place, and, as the evidence received from Liverpool shows, there are other important factors which must be taken into account. Employers in Liverpool are seriously concerned regarding the problem of casual labour, and a summary of the evidence which they provided regarding their registration scheme is appended. For there is no doubt that this problem is at the root of most of the difficulties in the dock industry.

The system of registration in operation at Liverpool is the oldest in the country, and was introduced in 1912. The scheme is administered by the Ministry of Labour in co-operation with a joint committee of employers and trade-union representatives. The port is divided into six areas, in each of which is a Ministry of Labour clearing house, and there is also a central clearing house. The object of these clearing houses is to facilitate the centralised payment of wages, and of health and unemployment insurance, and they are intended also to co-operate in ensuring greater mobility of labour.

"The whole idea of the scheme lies in its endeavour to restrict the supply of dock labour—

- (a) To a number sufficient to meet the necessary fluctuations in the work ;
- (b) To those persons who may be said to follow genuinely the trade of dock labouring.”¹

With this object in view the Central Joint Committee has the power to issue tallies—the sign of registration of the docker—and to assign a quota to each area. In the first year during which the scheme was in operation, 31,000 tallies were issued ; in 1930 the number in circulation had dropped to about 21,500.

In 1930 there were fifty-four firms in the scheme, but a few engaged other than tally holders for parts of their work. Allowing for these, and for the few firms outside the scheme, it is estimated that there are something over a thousand non-tally holders regularly seeking work in the docks.

The reduction in the number of tally holders which has taken place since the initiation of the scheme suggests a substantial measure of decasualisation. It is certainly a fact that registration has appreciably restricted the old practice whereby men from other industries suffering temporary depression invaded the docks in search of employment. Otherwise, however, the scheme has not been as successful as its promoters hoped. In 1930, under the auspices of the Lord Mayor, and with the support and assistance of all concerned in the industry, “An Inquiry into Casual Labour in the Merseyside Area” was undertaken. After a comprehensive review of the evidence, and consideration of the various factors affecting employment, the report concludes : “The reduction in the number of registered dockers has, in fact, not been accompanied by increased regularity of employment.”²

By the support which they have given to the investigation both employers and unions in Liverpool have shown that they are alive to the gravity of the problem. Both sides admit that the industry cannot be satisfactorily organised while it depends upon casual labour. Concessions can only be expected from the workers if, in return, they receive a proper measure of security of employment.

¹ *The First Year's Working of the Liverpool Docks Scheme*, by R. Williams.

² Hanham, *An Inquiry into Casual Labour in the Merseyside Area*, at p. 21.

To achieve this, radical reorganisation is necessary, and it is unfortunately only too clear that regular employment for a portion of the workers must involve taking from others the chance of casual work which they possess under the present arrangement. One employer stated that his firm had considered various schemes for dispensing with casual labour, and had been forced to the conclusion that the problem could not be solved by any individual or group of individuals. "I can see," he said, "no possibility of our organising the industry to bring our costs down unless we recognise in the first place that no trade union is prepared to see a large number of men sacrificed and thrown out of employment. If you want to reorganise the industry . . . you will first of all be compelled to make an arrangement with the Government for looking after the mass of displaced labour."

Certainly the problem is large enough and urgent enough to demand that every effort should be made to find a solution. It may be that it is beyond the powers of the industry to work out its own salvation, but the community has a right to expect that employers and workers will make a real and concerted attempt to find a way out. At present there is little evidence of co-operation to promote efficiency by the removal of evils which admittedly exist. It appears to be a case of "pull devil, pull baker," with each side suggesting that the other is getting more than his fair share. Such a condition of affairs is inimical to the public interest, and does not reflect to the credit of either employers or workers in the industry.

THE ELECTRICAL INDUSTRY

I. INTRODUCTION

THE ELECTRICAL INDUSTRY is one of the newer industries of the country. It has grown very rapidly since the war, and must already be regarded as a key industry, and one with a great future before it. It has widespread ramifications throughout the country, and the employers include, besides private firms, both local and central authorities.

The industry is divided into four principal sections—contracting, power supply or generation, cable making, and the manufacture of electrical machinery, which is closely allied to mechanical engineering. Contracting, the section with which the public comes most into contact, includes all that is connected with the installation of both light and power in private houses, workshops, factories, and ships. Apart from those directly employed in the industry, there are many electricians employed in other trades in the maintenance of installation and of electrical plant. With the development of the grid, the importance of the industry is steadily increasing.

According to the Ministry of Labour returns, there were, in October 1934, 91,190 persons engaged in electrical engineering, 83,360 in electrical wiring and contracting, 133,280 in the manufacture of electrical cables, miscellaneous apparatus, lamps, etc., registered as being, or having last been, in the employ of firms in the industry. In addition, there were 194,600 insured persons in the "Gas, Water, and Electricity Supply Industries." These figures, however, are unreliable, since they include a large number of unskilled workers, and the principle of classification is not the same throughout the country. In London and Yorkshire, for instance, assistants on contracting work are classed as electrical workers, but in other parts of the country they are classed as labourers, and would not, therefore, appear in the Ministry's figures.

There are various employers' associations in the different

sections of the industry. The Cable Makers' Association, a very powerful body, includes all the larger firms within that section. The smaller firms have formed an association of their own, but in practice they follow the lead of the more important employers. On the installation side, apart from the local authorities which undertake this kind of work there are many private firms. For the most part these are small units, and a firm employing as many as a hundred men is exceptional. The employers in this section are organised in the National Electrical Federation. In the generating section there are some half a dozen employers' associations, which, together with the representatives of the municipalities,¹ from the employers' side of the Joint Industrial Council for this part of the industry.

The most important organisation on the employees' side is the Electrical Trades Union. This body, which has a membership of approximately 32,000, is the only workers' organisation in the contracting section. It was round this aspect of the industry that the union was built up, and, while it draws members from other sections, its chief strength is still among the installation workers. The Amalgamated Society of India Rubber, Cable, and Asbestos Workers caters especially for workers in the cable-making section, and the general labour unions are also concerned in this side of the industry.

In each of the three sections—contracting, generating, and cable making—there is an active Joint Industrial Council. The various associations and unions enumerated above supply respectively the employers' and the workers' representatives on the Councils. The Councils play an important part in the industry ; they decide the principal working conditions and provide machinery for the prevention of disputes. In the first place, every question likely to cause dispute is discussed between the employer and the men directly concerned. If an agreed solution cannot be found, negotiations take place between the firm and the union concerned, and the matter can be referred further, if necessary ; first to the District Joint Industrial Council and then to the National Joint Industrial Council in that section of the industry. The procedure has proved satisfactory in practice.

¹ The municipalities may be members of the Incorporated Engineers' Institute, which is represented on the Joint Industrial Council.

II. THE EMPLOYERS' POINT OF VIEW

While the views put forward by the employers in the different sections of the electrical industry necessarily differ on certain points, they are unanimous in expressing their appreciation of the friendly spirit and good sense of the men's representatives. The cable makers speak appreciatively of the good work of the union representatives on the Joint Industrial Council; a representative of the employers in the generating sections states: "Speaking broadly, the unions have been of very great assistance. We know they will honour their agreements"; while, in the opinion of the National Electrical Federation, "the Electrical Trades Union is very anxious to get any difficulties settled." "They are also anxious to anticipate difficulties, which is a great step in the right direction. . . . In fact, we should like to see the Electrical Trades Union controlling all the operatives in the industry."

Employers throughout the industry are emphatic that they regard strong trade-union organisation as necessary in the best interests of the trade, for two reasons. Firstly, they see in the unions a safeguard against the Communist element, and they point out that the electrical industry, especially as the grid extends, is particularly vulnerable to sudden attack. Secondly, the employers believe that the Joint Industrial Councils are of great benefit to the trade, and these can only function properly if both employers and workers are so organised that their representatives can speak with unquestioned authority. The Cable Makers' Association feels so strongly on this matter that they have twice issued pamphlets to their workpeople pointing out "that the Councils are only possible between organised employers and organised workers, and that there could be no Council unless there were trade unions, and therefore it is the business of the employers to see that they have proper representation by the trade unions."

A. Recruitment and Utilisation of Labour. Entry by apprenticeship is the normal method in the contracting side of the industry. The employers' federation is very anxious that all workers should have served an apprenticeship, and many firms insist on this as a necessary qualification. Nevertheless, there are many small men

who call themselves electricians, and many people who consider themselves competent to undertake an apparently simple job of wiring, who have had no proper training, and the federation believes that these constitute a real danger. Wiring is speedily covered up, so that shoddy work cannot be easily detected, and the increasing use of alternating current renders the consequences which may result from faulty installation much more serious. In the opinion of the federation, a proper training is essential, and they would like a scheme, such as the plumbers have, providing for the registration of all operatives.

Employers in this section do not consider that apprenticeship is properly the concern of the Electrical Trades Union. The only agreement that they have with the union on this matter concerns the employment of unskilled labour, in which apprentices are included. It runs as follows : "The amount of unskilled labour (indentured or otherwise) employed on any one job (except on special jobs, such as heavy mains work, or other work to be specified) shall be not more than one to each fully paid journeyman." The federation regards this as an important safeguard.

With regard to training, the federation "is definitely out for indentured apprenticeship, and will be content with nothing less." They feel that indenture gives the apprentice greater security of tenure, and forces the master to realise his responsibilities.

In the other sections of the industry there is not the same insistence on apprenticeship. The men in the more responsible positions in the power stations have had a proper training, but a good deal of unskilled labour is also employed. Cable making is not considered a skilled trade. Recruits are taken on in the first place as yard labourers, and they can work up through two intermediate grades till they are capable of taking charge of a large machine, with helpers to do the moving and other laborious work.

The electrical industry is not seriously troubled by demarcation disputes. The cable makers have an agreed schedule defining occupations, and "we really can say that we have no demarcation troubles." Similarly, it is reported with regard to the supply section : "We have been singularly free from demarcation disputes during the last ten years." On the installation side, matters are not quite so easy. In shop work, for instance, there are a number

of small jobs which the electrician could easily undertake, such as connecting up a refrigerator with a water tap, but a plumber has to be employed. The employers state that this kind of thing is not serious on a large contract, but on a small job "it puts up the cost very considerably."

Instances also arise where the Electrical Trades Union claims work which, in the opinion of the employers, could be adequately performed by other labour. For instance, where walls have had to be broken, electricians in some parts of the country claim that they should do the chasing of the walls. "While it might suit our convenience on small jobs to use an electrician, the employers reserve the right to employ a suitable class of labour for the work. It might be a bricklayer or a bricklayer's labourer."

One interesting case was reported regarding electrical installation at a large power station. The owners specified that the earthing should be done so that every piece of metal in the building should be earthed. "That meant connecting an insulated wire to every electrical point, and to every other piece of metal-work in the building. The electrical contractor got the job, though it was not strictly electrical work. All it meant was efficiently connecting this copper wire to all metal-work in the building. The electricians immediately claimed that it was their work. We claimed that the appropriate labour might be anybody. Certainly an engineer's fitter was far more capable of bolting the pieces of wire on to the metal-work than an electrician was likely to be. We had a fight on it, and we won. . . . We consider that the action of the Electrical Trades Union in trying to insist that such work must be done by electricians is hampering, and unnecessarily raises the cost of carrying out that class of work. . . . Nevertheless, generally speaking, our demarcation difficulties are not very severe."

B. Hours and Wages. The electrical industry has a forty-seven-hour week; and systematic overtime is strongly deprecated. The National Electrical Federation holds that the employer who consistently works overtime "is exploiting the industry to that extent, because he is keeping a certain number of men out of employment who would otherwise be in employment. . . . We consider that a man who has done eight and a half hours a day has done his job."

Throughout the industry it is agreed that overtime may be necessary in cases of breakdown or other emergency, but otherwise employers generally subscribe to the view that "overtime is wrong in principle."

With regard to wages, mention is made of piece work, but there is no suggestion of any difficulties with the unions. In the cable-making section there is a good deal of piece work, particularly in the North, and the association has an agreement with the trade unions regulating the relation between piece prices and day rates. The National Electrical Federation, on the other hand, is "definitely against piece work. We consider our type of work is quite unsuitable." It would be impossible to have proper supervision, and installation is work that needs skill and care, and should not be endangered by being rushed.

C. Other Conditions restricting Efficiency and Output. Employers in this industry are clear that the small measure of ca'nanny which exists is not due to the action of the unions. They state that there is an extremist element which will sometimes try to cause trouble in this as in other ways, but it has not the support or the approval of the unions. In fact, the employers have no other points to raise, for, they point out, their relations with the unions are on the whole very satisfactory.

III. THE TRADE-UNION REPLY

The representatives of the workers endorse the statements of the employers as to the amicable relationships which characterise the industry. They find that the Joint Industrial Councils work very satisfactorily, and they appreciate the desire of the employers that the men should be properly organised. They feel, however, that this object could be more easily attained if the employers would agree to employ none but trade unionists. Further, the Electrical Trades Union is of the opinion that there should be one organisation only for workers in the industry. On the contracting side this is the case, but in the generating section "other unions, during the war, fixed themselves on the industry, and have used that position in the interests of their own organisations." The union feels that it would be to the advantage of the employers to deal with one organisation only.

A. Recruitment and Utilisation of Labour. The Electrical Trades Union has very strong views on the subject of the untrained persons who undertake electrical work (pp. 131-32). "In 999 cases out of 1,000, where accidents are reported they are due to the fact that the person who installed the electrical appliance had no proper electrical knowledge, and the installation was done in a faulty manner." The union regrets that the employers in the contracting section will not enter into an agreement regarding conditions of apprenticeship, since they feel that all workers in the industry, including apprentices, should be union members. A proper training is essential, and the union wishes to co-operate with this end in view. The apprentice who comes into the industry is trained, not by the employer, but by the workman with whom he works, and the union feels that, as representing the actual teachers, they should have some status in apprenticeship matters.

They agree that the position with regard to unindentured apprentices is unsatisfactory. Boys are often taken on in this way by small firms because they provide a useful form of cheap labour, and then they are turned out at the end of their time. They are properly trained—the workman has seen to that—but their chances of employment are precarious. Another point made by the unions concerns the length of apprenticeship training. They are disturbed to find that, in some cases, indentures are signed for a period of three years only; in their opinion a five years' training is necessary for proficiency.

The unions do not consider that demarcation disputes are of any real importance in the industry. Isolated cases may occur, but they are not serious. With regard to the case cited on p. 133, the position was that the contractor, by employing workers at the engineering rate, was able to save a considerable sum of money on the contract. In the opinion of the Electrical Trades Union, earthing is definitely part of the electrician's job. It is essentially a part of the installation, and one upon which the safety of the whole largely depends. It should, therefore, be undertaken by a skilled man who has had a proper training in electrical work.

Apart from these two points, the unions feel that there is little in the employers' statement that calls for reply. With regard to hours, they agree wholeheartedly that systematic

overtime should be condemned, and they are also negotiating at the present time for a reduction of hours to forty per week.

In conclusion, they "do not believe that there is an industry in the country where the relations between the employers and the unions are of a more amicable character."

IV. SUMMARY

The result of this investigation is to show that the electrical industry is not hampered by restrictions due to trade-union action.

One point of interest which emerges concerns the employment of non-union labour. Employers in the industry, more than in any other, express their approval and encouragement of strong workers' organisations, yet they will not accede to the request of the union that they should employ only trade unionists. The National Electrical Federation state that it would be glad to adopt the suggestion, but that it cannot do so at present because of the danger of undercutting by non-federated firms. This argument, however, does not apply to the cable makers. In that section the employers' association is very strong, and, according to its representatives, very anxious that the workers should be properly organised. They have not, however, vetoed the employment of non-union labour.

In general, relations between employers and employees in this industry appear to be good, and the rapid development of the past few years has been materially assisted by friendly co-operation between the two sides.

THE ENGINEERING INDUSTRY

I. INTRODUCTION

IT IS DIFFICULT to find a satisfactory definition of engineering. Originally, the term referred especially to the operations of those who constructed engines of war and other military works. During the eighteenth century, however, a class of engineers arose whose work was not primarily of a military character, and their aims and functions were described in the charter granted to the Institute of Civil Engineers (London), in 1828, as the

“art of directing the great sources of power in nature for the use and convenience of man, as the means of production and of traffic in States, both for external and internal trade, as applied in the construction of roads, bridges, aqueducts, canals, river navigation, and docks for internal intercourse and exchange, and in the construction of ports, harbours, moles, breakwaters, and lighthouses, and in the art of navigation by artificial power for the purposes of commerce, and in the construction and adaptation of machinery, and in the drainage of cities and towns.”

Since then specialisation has led to the recognition of subdivisions, such as marine, electrical, chemical, and mining engineering—distinctions which, while they illustrate the scope of the industry, do not render its definition any easier. Consequently, it is often difficult to draw a hard and fast line between engineering proper and some of the aspects of the shipbuilding, iron and steel, and building trades.

According to the Ministry of Labour returns, there were, in October 1934, 692,220 insured persons registered as being, or having last been, in the employ of firms engaged in “Engineering, etc.” Under this head are included

general engineering, electrical engineering, marine engineering, and constructional engineering, and the percentages wholly or temporarily unemployed in these sections at that date were 14·3, 6·9, 28·6, and 20·7 respectively. It should be remembered, however, that engineering impinges on a number of industries which appear under other classifications in the returns provided by the Ministry ; such as, for instance, "Construction and Repair of Vehicles." In 1926, in the course of an inquiry into apprenticeship, the Ministry estimated that there were about 1,060,000 male workpeople of all grades employed in Great Britain and Northern Ireland in the engineering industry.¹

The national labour organisation for employers in the industry is the Engineering and Allied Employers' National Federation. This is composed of local associations, which any firm engaged in engineering can join. In 1927, there were 2,164 federated firms, representing, under normal conditions, 750,000 workpeople. Firms which are engaged in shipbuilding or in the iron and steel trade as well as in engineering often belong to other associations besides the local engineers' association. There is no permanent machinery for ensuring common action by the employers in the three trades, but there have been occasions when the engineers' and the shipbuilders' federations have undertaken joint negotiations with the workers.

On the men's side there are about forty-five trade unions in the industry,² of which some of the more important are the Amalgamated Engineering Union, the Boilermakers' and Iron and Steel Shipbuilders' Society, the Electrical Trades Union, the National Union of General and Municipal Workers, the Transport and General Workers' Union, and the United Operative Plumbers' and Domestic Engineers' Association. Some unions cater only for skilled workers, but in others the qualifications of membership are not strictly defined. The Amalgamated Engineering Union, for instance, has decided to open its ranks to any worker who is engaged in engineering work, thus seeking to bring into an association devoted exclusively to engineering those men for whom previously the general labour unions offered the normal method of organisation.

¹ *Report of an Inquiry into Apprenticeship and Training*, Vol. VI., p. 5.

² See table, Appendix B, p. 165.

For purposes of negotiations on national issues with the Engineering and Allied Employers' National Federation, the unions in the industry have formed a representative committee known as the Engineering Joint Trades Movement. This is not a permanent organisation, but a temporary body which can function if required when questions of importance to the industry as a whole are raised. Another body which promotes co-operation between the various unions is the Federation of Engineering and Shipbuilding Trades, which was established in 1890. In the rules of the Federation of Trades it is stated that the constituent unions have agreed to this "union of executives," with the object of "finding a policy which will bring about uniform conditions for all workers, and ultimately obtain control of all industries for the benefit of the workers" (Rule 1). The Federation plays an important part in negotiating working conditions with the employers in both industries.

For various reasons, financial and otherwise, several important unions are not members of the Federation of Trades, though for the most part they act in close and friendly co-operation with it. Chief among these is the Amalgamated Engineering Union, the largest workers' organisation within the industry. This body is the heir of the old Amalgamated Society of Engineers, and was formed in 1920, when the society combined with nine other unions. The latest available returns of the Chief Registrar of Friendly Societies give the membership of the Amalgamated Engineering Union at the end of 1931 as 207,519. Of this number, approximately 24,000 are overseas members, and the total figure includes members who are employed on engineering work in other industries, such as iron and steel and mining.

The engineering industry has a long history of industrial conciliation. The first formal agreement between the Employers' Federation and the unions was drawn up in 1898, after the "forty-eight hours" dispute, and became known as the "Terms of Settlement." It covered many of the principal conditions of work, including overtime, wage negotiations, apprenticeship, and functions of management, and machinery was provided for avoiding disputes in the future. In 1907 a new agreement was negotiated which superseded the "Terms of Settlement," and

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this continued until 1914, when it was terminated by certain of the signatory unions.¹ During the war, abnormal conditions obtained in the industry, and the next general agreement was the Managerial Functions Agreement of 1922. This asserted the principle of freedom of management, and followed the earlier agreements in providing elaborate rules for the avoidance of disputes. This procedure is to be applied, as far as is practicable, to general alterations in wages and hours, but in these latter respects the agreement is not of so comprehensive a nature as the earlier ones. It has been supplemented by others, of which the latest, made by the Employers' Federation and the Engineering Joint Trades Movement in 1931, deals with overtime, double day shift and three shift systems, and payment by results.

II. THE EMPLOYERS' POINT OF VIEW

The method by which the evidence set forth in this section of the report has been collected has already been described.² Some of the examples cited have bearings on allied industries such as shipbuilding—indeed, the engineering and shipbuilding reports should be read in conjunction, since, on the trade-union side, they have much in common. In addition to these instances from working practice, quotations from trade-union rules have, in appropriate places, been adduced in evidence. Some employers have pointed out that these rules are not actively enforced at present, but others observe that there does not appear to be any certainty that they will remain permanently a dead letter. To the outsider, endeavouring to obtain an impartial view of the industry, these rules, so long as they remain unrepealed, represent the declared policy of the unions. Their non-enforcement at present may be due to the relative weakness of the unions during a prolonged period of trade depression, and they may be revived as trade improves and the unions become more prosperous.

A. Recruitment and Utilisation of Labour. *Recruitment.*—Skilled and semi-skilled workers generally enter the

¹ These later negotiated a new agreement known as the York Memorandum, 1914.

² See Introductory Chapter.

industry as apprentices or as learners.¹ From the figures obtained in their inquiry, the Ministry of Labour estimated that, of all the workers under twenty-one years of age in the industry, about 32 per cent were apprentices and 11 per cent learners.² Verbal agreements are the more common, and conditions as to methods of instruction, wages, and periods of qualification vary considerably.

Trade-union regulations affecting apprenticeship also vary very greatly. Some unions have rules fixing a ratio of apprentices to journeymen; others require that certain wages shall be paid on qualification; others, again, ignore the whole subject. The declared policy of the Employers' Federation is that "they [the employers] do not admit the right of any trade union to regulate the wages and conditions of apprentices." The evidence, for the most part, goes to show that the employers have little difficulty in putting their contention into practice, though one case of successful interference by a union has come to light. The Coventry branch of the Sheet Metal Workers' Union—a very strong organisation—insists that firms in the district shall only take on apprentices in the ratio of one to every ten journeymen. This limitation is serious since the employers state that in normal times there would be real shortage of skilled tinsmiths.

Utilisation.—The utilisation of available labour to the best advantage is of primary importance in every industry. Attempts to impose restrictions, both on the choice of persons to be employed and on the nature of the work which they may undertake, may seriously hamper efficient organisation. On both these counts the employers in the engineering industry put forward a case for the unions to answer.

In the first place, with regard to freedom of employment the agreement of 1907 contained, *inter alia*, the following clauses:

"Every employer may belong to the Federation, and every workman may belong to a trade union or not, as either of them may think fit."

¹ "By a learner is meant a boy or girl who, not being an apprentice, is specifically engaged by the employer for a recognised period of training in the capacity of a learner, and is provided by the employer with instruction or with definite facilities for learning a branch or process of the industry concerned."—*Ministry of Labour: Apprenticeship and Training Report*, Vol. VI., p. 54.

² *op. cit.*, Vol. VI., p. 6.

“The trade unions recommend all their members not to object to work with non-union workmen, and the Federation recommends all its members not to object to employ union workmen on the ground that they are members of a trade union.”

Certain unions formally terminated this agreement in 1914, and no provision regarding freedom of employment was included in the Managerial Functions Agreement of 1922. In the meantime (1920) the Employers' Federation and the Electrical Trades Union had been concerned in a dispute as to whether foremen must necessarily belong to a trade union. This was ended by a declaration that “the Electrical Trades Union do not demand that foremen must be members of a trade union.”

The employers still continue to observe the principles laid down in the 1907 agreement, and make no claim to interfere with the liberty of the individual workman. On the other hand, several of the unions have rules showing that their policy is to force all workmen, with the possible exception of foremen, to join them. Typical rules framed with this object in view run as follows :

“That members in this branch shall not work mates in any shop with non-society men, and any member so doing shall be fined 5s. for the first offence, and 5s. per day so long as he continues to violate the above.”

“All riveting machines used in boilersshops or bridge yards must be worked by our members at riveters' rates.”

At present, while trade is so slack, this conflict of principle between the employers and the unions has little effect, but, in the event of an improvement in trade, there is ground for believing that it might lead to grave difficulties.

The second means by which the economic disposal of labour may be hampered is by attempts to limit very strictly the kind of work on which a particular workman may be employed. There are two aspects of trade unionism in the engineering industry which bear upon this question, and evidence is quoted below showing the results

which follow from the action of the unions.¹ It is argued that the utilisation of labour to the best advantage is affected, first, by attempts on the part of the skilled unions to establish a monopoly in certain grades of work, and, secondly, by demarcation disputes between the skilled crafts.

In the early history of trade unionism unskilled labour had no place. The unions were organisations of craftsmen, with an inherited and jealously guarded tradition of craftsmanship. When, in the late eighties of the last century, the unskilled workers began to form organisations, they were regarded by the craft unions with a hostility of which the results are still apparent. Industrial conditions have changed, and there is no longer the same cleavage between the two classes. As industry becomes increasingly mechanised, workshop experience is as good a qualification as apprenticeship for semi-skilled, and even, in some cases, fully skilled, work. The Employers' Federation in the engineering industry has recognised this, and has a carefully prepared scheme of up-grading, designed to provide opportunities for every workman to secure the employment for which he is best fitted by ability and inclination. The Federation points out that the putting of the scheme into operation depends on the employers, but it must be admitted that progress would be facilitated by the full co-operation of the unions. And this is not always available.

In 1921, negotiations were in progress regarding the conflicting claims of skilled and unskilled workers, and a statement made then by the employers puts the issue clearly :

“First, the Federation's relations to the trade unions. There was now a great number of trade unions to deal with. It would be out of the question to introduce a principle into any settlement with the Amalgamated Engineering Union which is not going to be made applicable to all the unions which represent skilled workmen, and others of a less skilled character.

“Second. The second consideration is one which resolves itself into a contest between the Amalgamated

¹ A third matter on which the unions have decided views—the manning of machines—might also be considered under this head, but for convenience of arrangement it is considered later. See pp. 150–51.

Engineering Union and the unskilled workers' organisations. As the employers apprehend the position, the engineers have determined that they are not going to allow these people to progress unless they join the Amalgamated Engineering Union, and, further, that the Amalgamated Engineering Union are going to expand their craft interests downwards in order to obtain for their members the lower-grade processes in machine operations. The unskilled workers are equally determined that they are going to demand, and maintain, that every member of their union is entitled to progress according to the ability he displays and the opportunities that occur."

As an example of the extent of this inter-union rivalry, the following instance is instructive.

At a certain shipyard it had been the custom for forty years for the fitting, fixing, and joining of the majority of the iron pipes to be done by handy-men pipe-fitters. These men were members of the National Union of General and Municipal Workers. The Amalgamated Engineering Union and the United Operative Plumbers' and Domestic Engineers' Association objected, and raised the matter with the firm. They admitted that the practice of the district for the past forty years was contrary to their contention, but they argued that they had always opposed that practice, and had made numerous attempts to get it altered.

It was pointed out to the representatives of the two unions that the National Union of General and Municipal Workers had a right to say whether or not their members should give up the work they had done for years, and the Amalgamated Engineering Union and the Plumbers' Society replied that they, as craftsmen's unions, could not enter into demarcation discussions with an unskilled union. No further developments were reported.

The employers hold that these inter-union disputes seriously retard the progress of the industry, and the dislike of the older organisations for the general labour unions helps to confuse any real consideration of the principles involved.

In addition to the conflict of interest between the skilled and unskilled workers, the contention is often advanced that much time is wasted, and money lost, through

demarcation disputes between the craft unions. This question, which is of the utmost importance in the engineering industry, requires careful definition.

Demarcation cases, properly so called, arise "where one trade claims from another work in which the latter is engaged," and the critics of the trade unions argue that such disputes largely arise through the failure of the craft unions to adapt themselves to the developments of modern industry. They have maintained out-of-date definitions and distinctions, and rules that were originally framed to secure a high standard of craftsmanship are now divorced from their true purpose in order to support the claims of a particular body of men to do a particular piece of work in a particular way. The criticism is not directed against the skill of the worker, but against the attitude of mind which regards the claims of one body of men engaged on a single operation, or group of operations, as of greater importance than the work as a whole.

Of recent years the difficulties with regard to demarcation disputes have not been so acute. Nevertheless, the evidence given in the following paragraphs was advanced to show how the failure of the craft unions to adapt themselves to natural evolutionary changes in the materials and methods of the industry has resulted in obstruction, and consequent loss of efficiency.

In regard to disputes due to changes in materials the following examples may be cited :

(1) "Coppersmiths had been engaged by a motor firm on copper oil suction and delivery pipes, but, when they decided to change these pipes to steel, the brazing of the brass ends on the steel pipes was considered to be just as much a sheet metal worker's job as a coppersmith's. As the coppersmiths and the sheet metal workers were working together in a comparatively small shop, it was much to the firm's advantage that the work should be interchangeable, so that one or other of the tradesmen could do the work as was most convenient.

"The coppersmiths claimed that, as they had once brazed the pipes, they must remain coppersmiths' work, no matter what metal they were changed to, and the Amalgamated Engineering Union and the Coppersmiths' Society took up the matter.

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"Finally, it was agreed between the Coppersmiths' Society, the Amalgamated Engineering Union and the Sheet Metal Workers' Union that copper pipes were coppersmiths' work, but, if a change was made to steel pipes, it should become the work of either trade to be distributed as suited the firm."

(2) "A few years ago, a firm experimented with aluminium, stainless steel and nickel in their sheet metal department, and orders for brewery work were received. This work, other than ordinary coppersmiths' work, was carried out in the sheet metal department. Later, the firm obtained an order for similar brewery vessels with aluminium linings, and both the coppersmiths and the sheet metal workers claimed the work. The coppersmiths said that the lining of vessels, whether copper or aluminium, was not tinsmiths' work, and, when the firm would not admit this, a strike followed."

The following examples illustrate the difficulties that may arise through changes in methods.

(1) "A firm were engaged on a job for the carrying of lengths of 4" W.I. piping across a river for the purpose of taking P.O. cables, and had some difficulty owing to the pipes breaking. The firm employed on the work brass finishers and fitters who were engaged on the screwing work of the socket joints.

"It was arranged that a new lot of pipes should be used and the sockets welded at the ends after being screwed into position. The coppersmiths claimed that they should do this work as the iron pipes originally used were bent by coppersmiths, and when damaged were straightened and welded where necessary by coppersmiths.

"The firm contended that the oxy-acetylene welding process did not belong to any particular trade, and that as the work on the old pipes had been previously done by brass finishers and fitters, they were entitled to employ these men on the welding. In this instance, the coppersmiths went on strike, and the firm had finally to give way and send a coppersmith to do the work."

(2) "A firm was engaged at a power house on switch-board cell work, which included the fixing of artificial

stone blocks, and, in accordance with their previous custom, employed fitters on the fixing of these.

"The Amalgamated Union of Building Trade Workers claimed the work, though the firm argued that it was necessary for the men fixing the slabs to have engineering knowledge of the gear to be erected in the cells, and, moreover, only engineering tools were used in the work.

"Eventually, the union withdrew its claim in this particular instance, though standing by the general principle, because the firm pointed out that, if they pressed their case, iron and steel or asbestos would be used instead of concrete."

In other cases, the ultimate location of the article produced may affect the question of who claims to make it. Exactly similar pipes may be handled by different trades because in the one case they are used on a ship, and in the other on a building. Again, the function of the product may be of importance. One trade claims the work in connection with drains on board ship, another that concerned with scuppers, so that the demarcation difficulty is complicated by the vexed question, When is a scupper not a drain ?

The problem of demarcation affects the industry even more urgently in work in which a number of crafts are concerned, and where continuity of operation is essential. Often the organisation of a factory may not be complete from the point of view of the competing trades. For instance, certain kinds of work are claimed by the copper-smiths, but, in a factory which has no copper shop, such work as is needed may be done efficiently by the plumbers. If the coppersmiths insist that they should have the work, they are in fact facing the employer with the alternative either of sub-contracting the work or of starting a copper shop. The issue goes beyond the question of demarcation, for in such cases the unions are virtually claiming to influence the policy of the management. This question will be considered later ; the immediate application of the example is to show how the competing claims of the craft unions may raise costs and cause unnecessary delay.

The department of the engineering industry where demarcation questions arise constantly, and the difficulties are most forcibly illustrated, is that concerned with the

erection of work away from the factory. It is impracticable to have all the crafts which may claim portions of such work ready at hand to do their particular jobs, when the greater part of these can be competently done by the men engaged on the principal sections of the work. Yet the craft unions have demanded that this shall be done.

In the case of steel erection, and lift and crane erection, a special class of men has been evolved capable of dealing with all—or, at any rate, the principal part—of the contract. Nevertheless, the plumbers have advanced their claim to all gutter work on steel buildings, irrespective of the material of which the gutters are constructed, and without distinction between work put into position by hand and work which requires heavy lifting gear. Instances have been known where only the actual experience of working on the girders has persuaded the plumbers to waive their claim.

The problems of outside erection cannot be met by a rigid insistence on craft distinctions. Some adjustment has been necessary, but, whenever it is possible, the crafts insist that the work shall be exactly apportioned between the different trades. The following incident illustrates very clearly the burden which may thus be placed on the industry :

“On an installation [consisting of two machines] which was being handed over, it was agreed that both the electro-mechanical brakes needed adjustment, and arranged that the contractor’s employees should do one and the client’s employees the other. The job had to be done on night shift. The contractor’s erector and his mate stayed the night, and finished their machine ready for the next morning’s work. The other was proceeded with as follows :

“Four men were appointed to the job—a fitter and his mate, and an electrician and his mate. The last-mentioned pair started first, and disconnected the electric wires conveying current. Then the fitter and his mate removed the nuts and lifted off the iron cover. The electrician and his mate then withdrew the electric magnet coil. Then the fitter and his mate proceeded to remove other nuts, pins, springs, etc., and re-adjusted the tension on the mechanical parts of the brake. This

being done, all the former operations were repeated in backward order, until the job was completed. Each pair of men had their own kit of tools, which had to be spread out each time an operation was performed, and removed so as to enable the next pair of men to act similarly. While one pair of men was engaged on an operation, the other two men were 'leaning' against any convenient support. The job was not finished in one night, so the whole gang attended again on the second night to get through with it."

Because of craft union rules, four men had to be employed for two nights to do a piece of work which it was demonstrated could be done by two men in a single night. In addition, the firm lost a day's use of the new machine.

B. Hours and Wages. A forty-seven-hour week for the engineering industry was established at the beginning of 1919 by a national agreement. Overtime and night-shift work were the subject of negotiations with the Amalgamated Engineering Union in 1920, and the terms then agreed were revised in 1931 in an agreement between the Federation and the Engineering Joint Trades Movement. In 1920 a joint committee of representatives of the employers and the unions was appointed "to investigate the economic relation of production to hours of work." The committee considered conditions abroad as well as in the United Kingdom, and reported in 1922.

In the evidence collected, there is no indication that the employers are dissatisfied with these agreements, or that they have any criticisms to make concerning the attitude of the unions.

It has not so far proved possible to reach similar national agreements on the subject of wages. There is an agreement standardising wages among woodworkers,¹ but, with this exception, the Employers' Federation has not pressed for a general standardisation of wages.

C. General Conditions affecting Output and Efficiency. In every industry, mechanical development and the introduction of labour saving and aiding appliances have caused divergence of opinion—more or less acute—between the employers and the workpeople. In the

¹ Woodworkers' agreement, December 1922.

engineering industry the matter was raised in the first negotiations between the Employers' Federation and the unions in 1898, and it has been the cause of much discussion, and even conflict, ever since.

The 1907 agreement contained the following clauses bearing directly on this question :

“Employers have the right to select, train, and employ those whom they consider best adapted to the various operations carried on in their workshops, and to pay them according to their ability as workmen.

“Employers, in view of the necessity of obtaining the most economical production, whether by skilled or unskilled workmen, have full discretion to appoint the men they consider suitable to work all their machine tools, and to determine the conditions under which they shall be worked.

“The Federation recommend their members that, when they are carrying out changes in their workshops which will result in displacement of labour, consideration should be given to the case of the workmen who may be displaced, with a view, if possible, to retaining their services on the work affected, or finding other employment for them.”

Though the agreement was terminated by the unions in 1914, the position set out in the clauses quoted represents fairly the attitude of the employers to-day. They consider that freedom in the manning of machines is essential to the proper management of the industry, and that the unions are hampering the industry in so far as they do not accept this principle.

Attempts have been made by the skilled workers to establish a monopoly for themselves in regard to the working of certain machines. Extracts from trade-union rules which illustrate this statement may be quoted :

“Any member of this society, either angle-iron smith, plater, riveter, caulker, holder-up, or sheet iron worker, instructing anyone not connected with our society (except legal apprentices) by allowing him to practise with his tools or otherwise instructing him in other branches of the trade, shall on proof thereof be fined for

the first offence 10s., for the second £1, and the third to be expelled the society."

"All riveting machines used in boiler shops or bridge yards must be worked by our members at riveters' rates."

The conflict is essentially one between the skilled and the less skilled men, and the former are endeavouring to retain their position and range of operation, if necessary at the expense of the industry as a whole.

Recent developments have complicated the issue, and there is evidence to suggest that efficiency is being further restricted by inter-union disputes. The Amalgamated Engineering Union has opened its ranks to the semi-skilled and unskilled workers, thus coming into direct conflict with the General Workers' Union. Nevertheless the Amalgamated Engineering Union claims that matters relating to the manning of machines should be settled by negotiation solely between themselves and the employers. In 1923 the Employers' Federation pointed out to the Amalgamated Engineering Union that the general workers had a vital interest in the question, and were told that the executive council would consider the whole matter. Negotiations are now taking place, and the matter may be regarded as *sub judice*.

The charge has sometimes been brought against the unions in the engineering industry of tolerating, and in some cases encouraging, restriction of output. From the nature of the case, it is difficult to give actual examples, but the rules of the unions provide *prima facie* evidence.

"Any member having so much time allowed for certain jobs shall be compelled to absorb the whole of such time on the task or be fined £1 for each offence.

"Members are specially requested to note this clause."

"No overtime to be worked while any member is unemployed."

"That all members shall, as far as possible, do a fair day's work, and any member doing or enforcing more than may be considered a reasonable day's work shall be warned by the shop committee . . . and if found guilty he shall be fined £1, and 2s. 6d. for each day he so continues to work."

It is said that some unions attempt to restrict earnings on piece work to what they consider a fair wage for a reasonable day's work. A few months ago a case arose in a factory engaged in the manufacture of gas-meters. The local branch of the Sheet Metal Workers' Union fixed a limit for piece work, and, when two workmen insisted on working hard enough to bring their earnings above that limit, the union demanded that they should be dismissed. The firm refused to penalise good work, and the union officials subsequently denied that there had been any attempt at restriction. Nevertheless, after the incident the average output in the department was a little higher than it had been.

Another instance of attempted restriction of output concerned a riveter who was something of a genius at his job. He brought his skill to such a pitch that he could earn three times the standard time rate. And, further, he so organised his own gang and inspired his fellow workers that the output of the shop was doubled. His union had a rule that only a certain number of rivets was to be closed per day, and, because this man exceeded that number, they first of all fined him, and then turned him out of the union.

In this case, the man in question was obviously exceptional, but, apart from his own remarkable performance, the effects of his example and organising ability on the other men in the shop are very suggestive. Clearly the policy of the union had stultified initiative and enterprise, and in this way had seriously restricted output.

An instance of restrictive practices during the War may be quoted here, as it shows the extent to which the union policy may be enforced, even in times of the gravest national need.

In 1915 an engineering firm undertook some munitions work which consisted in performing one operation in the production of shells. The work was turners' work, so some turners were put on to the job. They were trade unionists. Almost at once they reached an output of forty shells per man per day, and there they stuck. The firm knew that they were standing out for high piece rates, and eventually, because of the desperate shortage of shells in France, they gave way and fixed very high piece rates. Output then went up to forty-four shells per man per day, and remained at that level.

Shortly afterwards this firm started its own shell shop, and, as a result of this experience, determined to exclude all trade unionists from it. Girls were engaged, and were trained by draughtsmen from the drawing-office. They were taught the operation of grooving and waving R.T.H.E. shells—the work which had previously been done by the turners. Beginning with an output of ten per girl per day, they worked up to eighty per day. At this point the men approached one of the best girls and said that this rate of production must not continue. She was very indignant, and said that she was aiming at a hundred shells per day. Actually she eventually reached a daily output of one hundred and forty.

D. Managerial Functions. In the agreement of June 1922, which ended the managerial functions dispute, the Employers' Federation and the various unions both subscribed to the general principle that :

“The employers have the right to manage their establishments and the trade unions have the right to exercise their functions.”

The respective spheres of interest were not defined, and objection is taken to certain aspects of union policy which do not appear to be in accordance with the agreed principle.

The first of these has already been mentioned,¹ and relates to attempts to influence the equipment of a factory. The employers claim that “the right to manage their establishments” includes the right to determine whether or not a subsidiary process is sufficiently important in relation to the main purpose of the factory to justify the setting up of a separate department.

Secondly, unions outside the engineering industry have attempted to dictate conditions concerning its work and internal organisation. For instance, the newspaper printing trades have taken action against their own employers in order to compel engineering employers to employ a certain grade of labour on engineering work in newspaper offices.

In illustration of this contention the following case is instructive :

“A firm of toolmakers supplied a gear-cutting planing machine, and the contract price included an allowance

¹ See p. 147.

for the services of one of the firm's demonstrators to give instruction in the operation of the machine. The demonstrator attended at the works, but the men objected to him carrying out his job. About 500 men stopped work, and the superintendent advised the demonstrator to leave, after giving what verbal instructions he could to the foreman. The men resumed work immediately the demonstrator had left.

"The firm explained that the demonstrator had been in their employ for thirty years.

"On making inquiry, the firm was advised that the matter was mishandled by the labour superintendent, and that probably there would have been no trouble if the demonstrator had been described as an instructor; that the whole trouble arose from the demonstrator putting on an overall coat in which to work, and if he had done his job in ordinary clothes there would have been no trouble."

III. THE TRADE-UNION REPLY

In framing their reply to the arguments of the employers, the trade unions in the engineering industry lay stress on the diversity of crafts and grades within the ranks of the workers. They also emphasise the fact that the industry is divided into many sections, each of which has its own peculiar problems. Within the compass of a single chapter it is only possible to indicate the general policy of the workers as expressed by the chief of their organisations. The men's representatives have pointed out that some of the instances advanced by the employers have only a local or sectional bearing, and that of necessity exceptions must arise which do not agree with their declared policy.¹

A. Labour. Entry to the skilled trades in the industry is by apprenticeship, and the employers regard this as a matter outside the proper sphere of the unions (p. 141). The Amalgamated Engineering Union does not agree with this contention, "and has repeatedly approached the Engineering and Allied Employers' Federation to concede to the union the right to negotiate on behalf of apprentices." Moreover, the unions are strongly of the opinion that the supply of skilled men is being endangered by the policy

¹ e.g. see p. 156, *post*, on demarcation disputes.

pursued by the employers. "There is evidence to-day that employers are minimising to the fullest possible limit the work which shall be allocated to the skilled man. This can only result in affecting the question of apprenticeship. When it becomes evident to parents that, notwithstanding the very low wages paid during the period of apprenticeship, no guarantee is given that the skilled work shall be retained by the skilled man, then I am afraid the apprenticeship system is doomed." Union leaders believe that, if the security of the skilled man is further undermined, the supply of recruits will fall off, and England's position as nursery for training engineers for the world will be seriously affected.

On the question of the best utilisation of the labour available the employers have more to say. They find that the policy of the unions may have hampering effects both as regards the choice of employees and the work on which they may be engaged (p. 141). On the first point—freedom of employment—it is asserted that pressure is put on all workmen to become members of the appropriate unions. The employers still hold to the principle enunciated in the 1907 agreement: that there should be no interference with the liberty of the individual (p. 141), but many of the unions have rules forbidding their members to work with non-unionists (p. 142).

In reply, the unions point out that they gave formal notice terminating the 1907 agreement, and that they are therefore not bound by its terms. On principle they believe that it is better that all workmen should be unionists. The unions have done a very great deal to secure better conditions for the workers, and, in recognition of these past services as well in the hope of future benefits, the men should actively support their associations. It is to the advantage of the employers, too, that the men should be properly organised. The unions are the medium through which the employers carry on their negotiations with their employees, and the best guarantee they can have that the agreements reached will be effectively carried out lies in the strength of the unions. It is to the employers' interest to assist to secure proper organisation among the men.

The second point to which the employers draw attention concerns attempts to limit certain grades of work to particular grades of men (p. 143). The question raises the whole

issue of the status of the craftsman, who has trained as an apprentice, as compared with that of the man whose qualifications depend on his own ability and the extent of his workshop experience. It is the contention of the employers that there are many men of the second class who could undertake semi-skilled, or even skilled, work, and they have prepared a scheme of up-grading whereby such men can progress according to the ability with which they make use of their experience (p. 143). They find, however, that their intentions are hampered by the craft unions (pp. 143-44).

The craft unions and the Amalgamated Engineering Union admit that they are opposed to up-grading in its present form. It appears to them as a means by which the employers hope to get skilled work done while avoiding the necessity of paying the proper craftsman's wage. They contend that it is unfair to expect a man to spend five or seven years in training, at a nominal wage, only to find that the work for which he has qualified is being given to others who have not served their apprenticeship. Naturally the craftsman clings to his work, and opposes the attempts of the general labour unions to secure openings for their members.

The whole question is bound up with the problem which arises from the increasing use which is being made of machinery in all sections of the industry. The craftsman finds that more and more of his work is being filched by the machine, and in self-defence he holds tightly to the little that is left. The Amalgamated Engineering Union denies that there is any real disagreement between themselves and the labourers' unions, and they state that they have now an agreement with the National Union of General Workers providing for joint action by the two unions with regard to the machine question. But they agree that there is a real and serious problem to be faced. They suggest that the employers should consider the damage which their scheme must inevitably do to the apprenticeship system. Do they desire that the craftsman shall disappear from the industry ? As the scheme is at present operated, it may be interpreted as an insidious attack upon wages. It may be that the old form of training requires reform, but the good faith of the employers would be less open to question if skilled work, by whomsoever it was performed, was rewarded by a skilled wage.

Other attempts to limit the scope of a man's employment arise through demarcation disputes between one craft and another (p. 145). Here again the root cause of the trouble is lack of security. The union leaders do not deny that there has been trouble in this respect, and that many of the disputes cannot be justified. One official remarked, "It is a suicidal policy; but you cannot expect the man whose livelihood is endangered to visualise the wider implications." Nevertheless, they believe that there is much less trouble in this respect than there used to be. There is machinery for dealing with disputes as they arise, and the men themselves are beginning to realise the harm that such quarrels do to both the industry and the unions. "The problem is engaging our attention . . . and it is our considered opinion that the remedy will be found within the unions for the elimination of this trouble."

Unfortunately, the lack of employment at the present time makes it difficult for the workman to take the longer view. He naturally clings to anything he can. "The real problem is psychological. . . . If a man has security of employment and favourable workshop conditions, he is not really concerned about the other fellow. It is the fear of being thrown out of employment—the same mentality that leads the people of Canada and the United States to oppose immigration."

B. Hours and Wages. Employers in this industry have very little to say under this head. They appear to be satisfied with the national agreement regarding hours (p. 149), while, with regard to wages, there is some comment on the difficulty of finding a satisfactory method of calculation, but nothing in the way of specific complaint (p. 149).

The unions, for their part, raise objection to the amount of overtime which is being worked. There is a national agreement limiting overtime to thirty hours per man, in any four weeks, with certain exceptions in cases of urgency, and they find that some employers stretch the interpretation of these "exceptions" beyond what might be considered reasonable. In principle the unions are opposed to overtime, and their insistence on a higher rate of payment for such work is designed to secure "the elimination of overtime on productive work." Employers have said that the rates are

too high. The unions reply, " We do not demand to work overtime. It is a matter for the employer, like night work. The organisation lies in his hands, and a proper system of works organisation would promptly eliminate, or substantially reduce, the amount of money which the employers are spending in night-shift and overtime rates."

C. Other Conditions affecting Output and Efficiency.

Increasing mechanisation raises serious problems in the engineering as in other industries. The employers hold that they must have complete freedom in choosing the type of worker to man the new machines (pp. 150-51), and they contend that attempts are made by the craft unions to hamper their freedom of action (p. 150). The issue lies between the craftsman, trying to keep control over the work which is traditionally his, regardless of changed methods, and the unskilled worker, who is graduating through workshop experience, and who is quite competent to undertake much of the machine work.

The point of view of the unions on this question has already been discussed in connection with up-grading.¹ Their arguments on that subject apply equally to the vexed question of the manning of machines. It seems to them only just that the man whom the machine displaces should have the opportunity of working that machine. Moreover, new machinery is only introduced because it is more profitable to the employer than the old method ; he could surely, then, afford to employ craftsmen on the work, and pay them their proper rate of wages.

The complaint is also made that unions in the industry have been known to tolerate, and even on occasion to encourage, restriction of output (p. 151). The Amalgamated Engineering Union states categorically that " there is nothing in the rules of such a character as to limit output," and denies that any attempt at restriction would meet with their tacit approval.² Other unions admit that there have been instances in the past when the men have refrained from giving of their best, but claim that the action of the

¹ See *ante*, p. 156.

² With regard to the instance cited by the employers on p. 152, concerning the employment of women during the war, the Amalgamated Engineering Union points out that early in 1916 the Amalgamated Society of Engineers agreed to dilution of labour, and its members set up machines to be worked by unskilled male and female labour.

employers in cutting prices on the slightest pretext "has been at the bottom of much of the trouble."

The position, however, is now different, thanks to the recent agreement whereby changes in piece rates can only take place as a result of alterations in either the method of manufacture or the materials used, and the unions believe that there is now no ground for charging their members with restriction of output. On the contrary, work is so scarce, and rates are so low, that men who are fortunate enough to be in employment would not think of doing anything which might jeopardise their position. "The British workman is the finest in the world, and he will always give of his best unless he finds he is not having a square deal."

Finally, the Amalgamated Engineering Union draws attention to the statement made by the employers on p. 153. They have no comment to make on the statement that unions outside the industry have attempted to interfere with matters of internal organisation, but they wish to point out that it is not a policy which they advocate. They have a large number of members employed in other trades, but they would not call out such men either for their own purposes, to further a dispute which concerned the engineering shops only, or in order to impose conditions on employers in other industries. Their policy is that they "will never call out their men in a firm or an industry where the main section of the workers is not in dispute."

In conclusion, the unions would suggest that many of the restrictions from which the industry suffers are due to the action, not of the unions, but of the employers. In 1931 two special conferences were held between the Engineering and Allied Employers' National Federation and various unions to consider the state of the industry. At these meetings criticisms were made concerning methods of organisation and of management. The employers were content to meet these by reference to the report of the Civil Research Committee which investigated the iron and steel industry on the Continent. That committee found that British iron and steel masters were as efficient as their Continental rivals, and their works as well managed, and the engineering employers contend that this applies equally to them.

The unions are not prepared to accept the committee's report in its entirety, or the implications drawn from

it by the engineering employers. With regard to iron and steel, they quote *The Times Engineering Supplement* (February 7th, 1931): "Moreover, it cannot be denied that high costs [of production] are in some cases the result of mismanagement and inefficiency in the industry." An employer, Wm. Jacks & Co., in a *Special Review of the Iron and Steel Trades in 1930*, has said, "The fact remains that there are not half a dozen really modern blast furnaces throughout the whole of the north of England, and . . . it is still true that most of the local blast furnaces are nearing the end of a long and useful life. Our iron masters are working, in fact, with worn-out tools which would be tolerated nowhere else in the world." The unions suggest that the engineering employers are scarcely happy in the comparison that they have chosen as a standard of efficiency.

The criticisms which the unions have to make cannot be better expressed than in the words of their representative at the conference: "It is incorrect for the employers to attempt to maintain, either in engineering or in iron and steel, that the opportunities for lowering the costs of production in directions other than increasing hours, cutting bonuses or wages, are not both manifest and numerous. Engineering is overloaded with masses of directors interlocking firm with firm, and firm with subsidiary, whose services are often grossly overpaid, and whose fees are a continual drain on the earning capacity of the industry. . . .

"Your marketing methods are antiquated. Your attempts to approach foreign customers, as report after report from our Consuls abroad reiterate year after year, are often ridiculously inefficient. . . . In finance, there is no need for me to point out to the Employers' Federation the need for financial reorganisation in case after case. The squandering of reserves in bonus issues, the failure to make proper provision for depreciation in the boom years, the accumulated weight of dead capital, the mass of high interest, bank loans, and debenture charges—all these evils are still factors of greatest prominence in the engineering industry."

IV. SUMMARY

In engineering, the strongest part of the employers' case concerns the utilisation of labour. It is clearly shown that demarcation disputes between the crafts, and disagreements

between the skilled and unskilled workers, have in the past retarded efficiency, and are liable to do so again in the future.

The counter-arguments put up by the men are similar to those advanced by the shipbuilding unions, and much that is said in the conclusions to that report applies with equal force to engineering. The value of an apprenticeship training, having regard to the changing circumstances of the industry, is the root of the problem. The engineering employers have prepared a careful scheme of up-grading, which has much to commend it, but they do not make clear the extent to which they propose that the new class of worker thus created shall take the place of the apprenticeship-trained craftsman. In the view of the unions, the employers' policy is short-sighted and is endangering the high standards of craftsmanship on which the world-wide reputation of British engineering is founded.

Nevertheless, the unions admit that demarcation barriers cannot always be defended, and it is satisfactory that they hope to deal effectively with this problem by agreement among themselves. It is to be hoped that the same means will prove effective with regard to the conflict between the Amalgamated Engineering Union and the general workers' unions. This is not essentially a matter between the skilled and the unskilled workers' organisations, since the Amalgamated Engineering Union is no longer confined to craftsmen; rather it appears to be an attempt on the part of one union to prevent any but its own members from progressing beyond a certain stage. It may be that there are points in favour of a single union embracing all grades within the industry, but the Amalgamated Engineering Union does not put forward this defence, and there can be no doubt that disputes of this kind must have an adverse effect on efficient development.

The unions further assert that the demand for a grade of semi-skilled workers is, in effect, an insidious attack on the standards of wages which have been established for the craftsman. It is difficult to assess the strength of this argument without a great deal of detailed information as to the nature of the work which this class of worker is to undertake. In general, the change from hand to machine processes means that there is less need for a high degree of individual skill, and this has been regarded as good ground

for paying the machine worker at lower rates than the craftsman. In engineering, there is no national agreement standardising wages, and it may well be that in some cases there is ground for inquiry into the rates paid to semi-skilled workers.

With regard to alleged restriction of output, the chief evidence is drawn from the rules of the unions. Little is given in the way of recent concrete example, and the employers admit that many of these rules are not actively enforced to-day. They cannot, therefore, be regarded as restrictions which are affecting the industry at the moment, but there is always the possibility that, like Acts of Parliament, they may be resuscitated.

Another alleged restriction concerns attempts to interfere with "functions of management." The evidence on this point is not conclusive. The clause in the agreement of June 1922, that "The employers have the right to manage their establishments and the trade unions have the right to exercise their functions," appears to the outsider practically useless unless the respective spheres of action are defined, and differences of opinion as to its interpretation would seem to be inevitable.

The investigation into this industry disclosed a marked cleavage of opinion between employers generally and those in one section thereof. The evidence collected in the Tees-side area, from firms engaged mainly in heavy engineering, is not in accordance with much of that contained in "The Employers' Point of View," and the differences appeared to the investigators to be sufficiently striking to merit separate mention. Accordingly, particulars relating to heavy engineering only are given in Appendix A.

APPENDIX A

Heavy Engineering

Engineering firms on Tees-side are mainly concerned with bridge-building and other forms of structural engineering. After the last big strike, many of them left the Engineering and Allied Employers' Federation—the national body—and formed a local organisation of their own. They found that their interests had little in common with those of the

general body of their fellow employers, and, in particular, they saw with dismay that the old friendly relationship between the individual employer and his workmen was threatened by the national association's policy of increased centralisation.

The workers engaged in heavy engineering belong to the appropriate engineering unions, though there are a few in the Iron and Steel Trades Confederation. Most of the constructional workers belong to the Boilermakers' Society, which is one of the strongest and most important unions in this branch of the trade. It is interesting to find some of the employers criticising the unions on the same grounds as they criticise their own national association. They find that the local union delegates are often men with general engineering experience, but little or no knowledge of the special problems of bridge and other constructional work.

In the main engineering report the evidence in support of the argument that the trade unions are hampering the efficient development of the industry is directed to three chief points. These are disagreements within the workers' ranks, interference with functions of management, and restrictions of output.

From the first of these—disagreements among the workers—the firms on Tees-side seem to be comparatively free. There is practically no evidence of demarcation trouble. On one or two occasions claims for work have been advanced on the ground of custom in other parts of the country. For instance, the Amalgamated Engineering Union claimed that waggon fitters should be employed for waggon-building, but the boilermakers successfully replied that the work was theirs by local usage. When disputes arise, it is the policy of the employers to leave it to the unions concerned to settle among themselves, and this plan has worked well. There was no evidence of difficulties arising between the skilled men and the other workers in the trade.

The only point raised under the heading, "functions of management" concerns the manning of machines. It was reported that occasional trouble arose with the boilermakers if apprentice labour was used for what they considered a skilled job, but this was of little importance. Generally speaking, employers and unions have a tacit agreement regarding the manning of machines, and work

amicably together to carry it out. The employers are satisfied, though one of them added, "It may be costing us more." Apparently they regard a friendly and co-operative spirit as well worth a possible small extra cost.

The attitude of the heavy engineering employers with regard to restriction of output is interesting. They believe that it exists, but they are not convinced that the unions encourage the practice. Rather, they are inclined to attribute it to two factors—the natural reaction of human nature to a particular set of circumstances, and an old-established local custom. To take the latter first. Even the best workers are inclined to view changes with suspicion, and they do not always make as much use as they might of new facilities. They are afraid that if they do, and output is greatly increased, a revision of the piece rates will follow, and they are naturally dubious as to the ultimate effect on their own earnings.

The local custom, to which employers take strong exception, is known as *lieu* work. It is a system whereby a man, instead of getting the ordinary time rate, gets time and a quarter or time and a half, the argument being that he will therefore work harder. The system is found mainly with men engaged on bridge work, and has been in existence in the district for some thirty years. The employers blame the unions for encouraging *lieu* work, and state: "It is definitely a case where this particular branch of the work costs more than it should, and we are losing a considerable amount of export trade through the higher costs of production." They hold that direct piece work, as it exists in some other departments of their works, is much more satisfactory.

Apart from *lieu* work, there is no evidence that the unions encourage practices likely to lead to restriction of output. In those shops where straight piece work is in operation, the earnings in any one week vary considerably from man to man, which is in itself presumptive evidence that no organised system of limitation of output exists.

In this section of the industry some criticism is made of the overtime rates, but the chief objection is to the limitation of overtime. The boilermakers' union limits overtime in any one month to thirty hours, and this is regarded as exceedingly irksome. Where complicated work is being done, as in a template shop, it may lead to considerable

expense and disorganisation. "When one man has spent days studying the drawings, he might find that his thirty hours' overtime are up, and, if the job is still urgent, we have to put another man on, and he has to go through the same procedure of studying the drawings. It is a source of great cost and delay to us. . . . It can quite easily mean that we miss a ship when sending goods abroad."

In conclusion, the general impression conveyed by the evidence is that relations between the employers and the workers in this section of the industry are good. There is considerable personal contact, and probably something is gained as well as lost by organisation on a local rather than a national basis.

APPENDIX B

List of Trade Unions party to the Managerial Functions Agreement, 1922

Amalgamated Engineering Union.

Amalgamated Society of Farriers and Blacksmiths.

Amalgamated Society of Woodcutting Machinists.

Amalgamated Union of Upholsterers.

Amalgamated Society of Scale, Beam and Weighing Machine Makers.

Amalgamated Society of Brassworkers.

Amalgamated Moulders' and Kindred Industries Trades Union.

Amalgamated Society of Railway Vehicle Builders, Wheelwrights, Carpenters and Mechanics.

Associated Blacksmiths', Forge and Smithy Workers' Society.

Association of Engineering and Shipbuilding Draughtsmen.

Birmingham Operative Tinplate, Sheet Metal Workers' and Braziers' Society.

Boilermakers' and Iron and Steel Shipbuilders' Society.

Electrical Trades Union.

General Iron Fitters' Association.

Iron, Steel and Metal Dressers' Trade Society.

National Union of General and Municipal Workers.

National Amalgamated Union of Enginemen, Firemen, Mechanics, Motormen and Electrical Workers.

National Amalgamated Furnishing Trades Association.

National Brass and Metal Mechanics.

- National Society of Coppersmiths, Braziers and Metalworkers.
- National Union of Clerks.
- National Union of Lift and Crane Workers.
- National Union of Sheet Metal Workers and Domestic Engineers.
- National Union of Stove, Grate and General Metal Workers.
- National Union of Vehicle Builders.
- National Amalgamated Labourers' Union of Great Britain and Ireland.
- National Union of Foundry Workers.
- Navvies', Builders' Labourers' and General Labourers' Union.
- Northern United Enginemen's Association.
- Operative House and Ship Painters.
- Operative Mule and Ring Spindle Makers' Society.
- Public Works and Constructional Operatives' Union.
- Scottish Brassmoulders' Union.
- Scottish Painters' Society.
- Scottish Union of Dock Labourers.
- Ship Constructors' and Shipwrights' Association.
- Society of Scale, Beam and Weighing Machinists.
- Transport and General Workers' Union.
- United Metal Founders' Society.
- United Operative Plumbers' and Domestic Engineers' Association.
- United Patternmakers' Association.
- United Operative Spindle and Flyer Makers' Trade and Friendly Society.
- Wheelwrights' and Coachmakers' Operatives' Union.
- West of Scotland Brass Turners, Fitters, Finishers and Instrument Makers' Society.
- Winding and General Engineers' Society.
- Workers' Union.
- Zinc and Copper Roofers' and General Sheet Metal Workers' Society.

THE FURNITURE INDUSTRY

I. INTRODUCTION

THE FURNITURE AND ALLIED INDUSTRIES include cabinet and other furniture making, upholstering, bedding and mattress making (not wire), wood carving and gilding. The industry is to be found in many parts of Great Britain; among the more important centres are London, High Wycombe, Bath, Barnstaple, Birmingham, Glasgow, Beith and parts of Yorkshire. According to the Ministry of Labour returns there were, in October 1934, 135,960 insured persons registered as being, or having last been, in the employ of firms in the furniture industry, of whom 22,920 were women; and 11·3 per cent of the total were wholly or temporarily unemployed.

The products of the trade are very varied, ranging from high-grade products, each individual piece the work of skilled craftsmen, to articles which are turned out in hundreds and made largely by machinery. Mass production in the furniture trade is a comparatively modern development which is yearly becoming more in evidence. The greater part of the market is now supplied by this means, but the general opinion in the trade is that there will always be a steady demand for fine hand-made pieces.

Of recent years the trade has had to face severe foreign competition, particularly in the medium-priced and cheap grades of furniture. Italian and Czecho-Slovakian, and more recently Finnish and Russian, manufacturers have made a special study of the English market, and, as they are reported to pay their workmen at the rate of 6*d.*–8*d.* an hour, they have been able to compete against English makers with a considerable measure of success.

The furniture industry is not organised on a national basis, though a co-ordinating Joint Committee has recently been set up. The employers have a number of local organisations of varying strength. In Yorkshire, for instance, it is conjectured that the local federation includes not more

than 15 per cent of the manufacturers in the area, but it is not easy to obtain reliable figures. Consequently it must suffice to mention one or two of the more important of the employers' organisations, though it must be remembered that local differences make it dangerous to generalise too freely from these.

Among the more important of the employers' organisations is the London Furniture Trades Federation. In other parts of the country there are a number of district associations such as the High Wycombe and District Furniture Manufacturers' Federation, the Northern Furniture Trades Federation and the Scottish Furniture Manufacturers' Association ; whilst five or six other local associations have united under the title of the National Federation of Furniture Trades.

Organisation among the operatives is also uneven in extent and difficult to classify. The National Amalgamated Furnishing Trades Association represents an attempt to bring all workers in the industry into one organisation, but, while it is the largest union in the trade, its present membership does not exceed 16,000. In more prosperous times it reckons to have a membership of about 25,000. The association is open to all workers, skilled and unskilled, and its members include upholsterers, french polishers, and machinists, though there are craft unions for these trades. The largest of such societies is the Amalgamated Society of Wood-cutting Machinists, but, in addition to the furnishing industry, this union covers joiners' shops and every kind of wood-working establishment.

Some of the craft unions have branches throughout the country, others are confined to a particular locality. The Amalgamated Union of Upholsterers is an example of the former, and the United French Polishers' London Society of the latter. Some of the semi-skilled and unskilled workers in the trade belong to general labour organisations. And, finally, in certain districts the local branches of the various unions have united for the purpose of negotiations with the employers. The Yorkshire County Furniture Operatives' Federation is an example of this last class.

The lack of any national organisation in the industry has resulted in a wide variation of conditions of employment in different parts of the country. The strength, both

of the employers' associations and of the unions, differs from district to district, and, while each locality has some kind of agreed working rules, there is considerable divergence on such matters as hours and wages. In addition, some agreements cover a much wider range of subjects than others.¹

In London, both the employers' and the workers' organisations are fairly strong. In 1930 and 1931 there were serious disputes with regard to wages, and the unions announced that they would no longer be bound by any of the existing working agreements. Protracted negotiations followed, resulting in the adoption of new working rules for the cabinet trade of London, but not, as yet, for the upholsterers.

The following facts relating to hours and wages, as existing in the industry at the end of 1933, give some idea of the range of conditions in the trade. Hours vary throughout the country from forty-four to forty-seven per week. Wages in most districts, but not all, are calculated on a sliding scale varying with the cost of living. The rates of pay for craftsmen show a range of from 1s. 4d. to 1s. 7d. per hour. In London, fourcutter and spindle hands receive 1s. 8d., and in Dublin the standard for craftsmen is 1s. 10d. per hour. Women's wages show a similar variation. Female polishers are paid at the rate of from 8½d. to 11d., and upholstresses from 7¾d. to 10d. per hour.

The position is further complicated by the fact that differences in working conditions often occur in areas which are geographically closely connected. For instance, the minimum rate for cabinet-makers in London is 1s. 7d. per hour, while in High Wycombe it is 3d. less. Again, in Leeds and the West Riding, the agreement is for a forty-four-hour week and a wage of 1s. 6d. per hour; but, in Sheffield, craftsmen receive 1s. 7d. per hour and work a forty-seven-hour week. Other conditions show similar variations. In Manchester, piece work is established, but in Yorkshire the unions will have nothing to do with any form of payment by results.

¹ In Glasgow and district, wages and other working conditions are decided by the Scottish Joint Advisory Committee, consisting of representatives of the employers and the unions, which has been in existence for many years.

II. THE EMPLOYERS' POINT OF VIEW

When considering the evidence regarding alleged restrictions in the furniture industry it is necessary to bear in mind the lack of uniformity in working conditions. Employers in one district find themselves confronted by difficulties which are less acute or even non-existent elsewhere, and, though the branch unions up and down the country have, in general, the same ends in view, the emphasis placed on different points varies considerably according to the conditions and customs of the localities. It is unsafe to accept any criticism as of general application, unless it is supported by evidence from a number of districts. Employers point out that some of their evidence may have only a local application.

A. Recruitment and Utilisation of Labour. Skilled labour for the trade is recruited by means of apprenticeship. The agreements specify the ratio which must be observed between apprentices and fully rated men, and this varies in different parts of the country. In Yorkshire the rule runs: "Each employer shall be entitled to have one apprentice to each three journeymen in any one section." Under the London rules the proportions are:

One apprentice to every three cabinet-makers, chair-makers and spray-polishers.

One apprentice to every four french hand-polishers.

One apprentice to every five machinists.

One apprentice to every three upholsterers.

In recent negotiations the London employers pressed for concessions on this point, but without much effect. The new rules make no change in the proportions allowed in the more important crafts, and take no account of the employers' argument in favour of a flat rate of one apprentice to every three journeymen, an arrangement which would allow of the distribution of apprentices through the different departments as might appear convenient at any one time.

Experience in London is in accordance with the general verdict that "even to-day there is a shortage of really skilled men." The unions are charged with protecting their older men at the expense of the future of the industry, and the employers feel that they could provide work for a

greater number of apprentices if they were allowed to have them.¹

In the London area the difficulties of recruiting labour for the skilled trades are complicated by the question of improvers.² In the mass-production firms, boys and girls are taken on for work which does not require a long training, and this kind of trade is subject to considerable fluctuations. In calculating the ratios under the working rules, apprentices and improvers are classed together as "underpaid" in contrast to fully rated men, and thus the number of apprentices that can be taken on is still further reduced. The employers have suggested that a distinction should be drawn between apprentices (i.e. those who are receiving a proper training in the trade), and "in-and-outers," but the unions will not agree. The contention of the employers is that there is a great deal of work for which, under modern conditions, a long apprenticeship training is not necessary. For instance, fine french polishing is skilled work done by hand, whereas cheap goods are polished by means of a spray, yet the training and the pay for the two kinds of work are theoretically the same. The employers feel that, for this kind of work, there should be a grade of semi-skilled labour with appropriate wages, and recruited by some other means than apprenticeship.

The changes which have resulted from the great increase in the use of machinery for the manufacture of the cheaper grades of furniture can be illustrated from another angle. A provincial employer, when asked for his views on the apprenticeship system, replied that he did not take on apprentices. "If I were to bind myself to teach a lad cabinet-making, I could not fulfil my part of the contract, because the lad would not learn cabinet-making, only assembling. The machine does a large proportion of the work, and there is not a lot left to be done by the ostensible maker. . . . To-day we are really furniture manufacturers and not cabinet-makers." This man follows the district rules with regard to wages and advancement, and he has

¹ One employer takes the view that machinery will ultimately be used quite considerably even for the finest work. Work is becoming more and more sectionalised, and, in his opinion, there will ultimately be a serious shortage of men fully and properly trained who can take a broad view of the trade as a whole.

² The term "improver" is used in a wider sense in the furniture trade than in some others, e.g. building.

no difficulty in obtaining lads. His is an open shop.

With regard to the utilisation of labour, in the London district, though there is an understanding that employers, provided they observe the working rules, shall be free to employ men who are not members of a trade union, a number of firms state that in practice they dare not do so. One employer told of his experience when he attempted to engage a man who was a charge-hand, and had left his union. The man was an excellent craftsman, and would have been a valuable acquisition. The employer said, "I was given notice by the union that, unless this man joined the union or I chucked him out, they would strike. I suggested to the man that he should join the union, and he agreed to do so. When he applied for re-entry he was fined £5 by the union. I put the £5 forward for the man, as he was a valuable man to me, but the union even then refused to take him into membership, and eventually I had to get rid of him to prevent a strike."

The evidence on this charge comes almost entirely from London, though employers in Yorkshire state that attempts are made to force non-union workers to join their appropriate unions.

The unions in London also attempt to prevent the employment of women on certain work. Much of the upholstery work, such as cutting loose covers and some of the repetition work in soft stuffs, is suitable for women, but the unions object.

The employers in the London area state that they cannot make full and economic use of their labour so long as the unions will not differentiate between skilled and other work. This point has already been noticed with regard to apprentices and improvers (p. 171), and it applies primarily to firms which are engaged in the manufacture of moderate and cheaply priced goods. The unions will not consider the suggestion that there should be different rates for machine minders and assemblers. One firm stated that an attempt was made to claim that men employed in screwing seats to the floor in cinemas should be paid the full cabinet-makers' rate, and the firm were only able to avoid doing this by sub-contracting the work. Many of the rules were made in the days when machinery played a much smaller part in the industry, and the employers feel that they are out of date and unsuited to

modern conditions. They consider that the unions' refusal to differentiate between skilled and semi-skilled work imposes a real handicap on the industry, especially in those grades which are subject to severe foreign competition.

Demarcation problems do not cause so much trouble in the furniture industry as in some others. A number of employers complain that they are often hampered by disputes between joiners and cabinet-makers. In the provinces sometimes the joiners' rate is the higher, sometimes the cabinet-makers'; but, whichever may be the case, joiners working in furniture factories have to be paid at the higher rate.

One large London firm is responsible for an interesting suggestion. Speaking of demarcation questions, the employer remarked, "There are many cases where one might suggest that an inter-movement between one trade and another would be an advantage, but this, generally speaking, the union tends to restrict. I take this line personally, and I think that it is a sound one : that so long as a man is a member of a trade union and we are paying him trade-union rates of wages, it should not matter on which stage of the process of a job the man is asked to work. If you have to have one man drop a job at a particular stage and another take it up, it is certainly an annoying process. To give one case. We have a man who is trained as a cabinet-maker or a joiner. There is a stage in between the machinery and the bench work which did not exist years ago. We mark up the stuff for the machine. A man who is a joiner has to be trained into that. There are minor machine-operations to do before he can mark the next stage. It may mean a little band-sawing. If there is a band-saw man near at hand this is all right ; but I see no reason why the man who is marking the drawing should not be allowed to do the little band-sawing that is necessary, without having to introduce a machinist. Members of the wood machinists' trade union would say that this is robbing them of their work. Personally, I look upon the machine section as an off-shoot of cabinet-work. The skilled man is a joiner or cabinet-maker, and the machine should be definitely a part of the construction, as it is doing work which we used to do by hand. The man on the bench is the man who pulls the job together ultimately."

B. Hours and Wages. As has already been mentioned, the normal working week in the industry varies from district to district. Agreements with regard to overtime also differ. In London, where the working hours are forty-seven per week (forty-four hours on night shifts), the rates for overtime are : time and a quarter for the first two hours, time and a half for the second two hours, and thereafter double time. In Yorkshire, the payment made is on the basis of time and a quarter for the first two hours, and time and a half thereafter. The working week in Yorkshire is forty-four hours, and there is an additional clause in the overtime agreement which runs as follows :

“ That any firm shall have the right to work an extra two and a half hours per week (one half-hour per day) at ordinary time rate when desired, for a period of, or not exceeding, thirteen weeks at one time.

“ Whatever period is thus worked, the same period shall intervene before the practice shall operate again.”

The overtime rates quoted for the London area are taken from the new rules, and are slightly lower than those which were previously in force. Another change is contained in Rule 3 (ii), which states, *inter alia* :

“ Where overtime is required for more than three days consecutively, the matter shall be referred to a Joint Committee of the Federation and the Federated Committee.”

The unions used to claim that overtime could only be worked with their permission, a contention which the employers did not admit, but which was nevertheless often enforced in practice. The new rule is a compromise which does something to meet the difficulty, but it does not satisfy those employers who believe that the regulation of overtime is a function of management, and that any arrangement which gives the unions a say in this matter may be detrimental to the efficiency of the industry.

The owner of a factory with a very large annual output explained how difficult it was to regulate the flow of work so that all the parts synchronise. Public taste in furniture is much more variable to-day than it ever was in the past, and it is necessary to make frequent alterations or

adaptations in design. "With your machine furniture of this kind you may at one time have a certain range of furniture coming through which has more spindle work than at other times, and, in order to get the quantity from that set of machines to balance with the other machines so that you finish simultaneously, you have to work one set of machines overtime or the others less time." The union, when the question of overtime was raised, would send a man down to inspect the factory, and, as often as not, withhold permission, though, according to the employer, "I have had a lot of experience, and, if I had been away for a week or two, *I* could not come to a definite conclusion as to whether overtime should be worked or not simply by going round the factory."

The different district scales in the industry, which the unions are said to favour, come in for much comment and criticism from certain sections of the employers. London firms in particular are badly hit, and hold that, whatever justification there may have been for the variations in the past, there is none to-day. "It used to be said that the reason London had to pay a higher rate was because the standard of work was higher; also the cost of rent was higher, but the one set off the other. . . . The two things don't set off each other to-day in the same way, because the large amount of machinery which comes into the work enables the provincial manufacturer to get the same standard of finished product as the London manufacturer, and the London manufacturer is left in the position of having to pay between 10 per cent and 15 per cent more in wages, and in addition his overhead charges are higher."

The opinion is expressed that the only way to restore prosperity to the London trade is to have less variation in rates of wages throughout the country. "Of course the trade unions would not mind bringing the provincial rate up to the London rate; but directly that was done they would use the same old argument that London should pay more."

The chief point at issue under this head is the question of piece work. The upholsterers do permit some piece work, but the wood-working unions have an absolute veto on anything of the kind. "In my opinion," says one employer, "this is the worst restriction of any." The employers argue that, especially in mass-production factories, the work is quite suitable for such a system of

payment, and repeated attempts have been made to get the unions to agree to it, but without success. High-grade work is a different matter, but this section of the trade is comparatively small, and the number of men employed in it is steadily diminishing.

Strong objection to the unions' attitude regarding payment by results is expressed by employers in nearly all districts. In Yorkshire it is said that a number of firms have left the employers' federation because they cannot afford to carry out the agreements with the unions unless they establish some form of piece work. One employer explained that they had no alternative but to put their workers on piece work, "because the hours and conditions allowed under the agreements with the trade union were restricting output." They resigned from the federation, instituted a system of payment by results, and the result has been an increase of over 50 per cent in output.

In this connection an interesting example may be quoted. A large firm was very dissatisfied with their output, and tried to discuss the matter with the unions. "We offered to draw up a system of payment by results, a bonus system, or anything they liked, in conjunction with the trade unions, but they simply said that they would not have anything to do with anything but plain time work, 'so you can get it out of your minds.' " The firm broke off negotiations with the trade unions, introduced piece work, and eventually resigned from the employers' federation. A strike took place, but they held on, and piece work has been in operation in the factory for some years now. They guarantee the trade-union rate of wages to the workers, and the average piece-work earnings in the factory in 1931 were about one-third above the plain time rate. A director of the firm, commenting on the whole question, said, "I think, if I had anything to do with the trade unions, one of the things I should do would be to recognise piece work and have it under proper control, rather than let firms secede from the federation and use piece work just as they like. It would be better to have organised shops under proper control. The union is letting it slip out of their hands, which I think is very foolish."

Firms engaged in upholstery work have not the same difficulties to face. Piece work is accepted in this branch of the trade, and the disputes which arise are concerned

with the question of the fixing of rates. Suppose that an employer is bringing out a settee with straight lines ; next year he wishes to alter the design a little, and introduces a curved back – an extra rate is immediately demanded. This in itself is probably fair enough, but the trouble arises from the fact that, every time any alteration is made, an addition is demanded, so that the cost grows like a snow-ball. The original rate remains as a basis, but every alteration, regardless of whether it simplifies or complicates the original design, is treated as justifying a claim for extra payment. The unions are said to encourage these exorbitant demands.

C. General Conditions affecting Output and Efficiency.

The manning of machines, which in recent years has caused trouble in a number of industries, is not a subject on which the employers in the furniture trade have much to say.

No evidence has been given of any attempt at dictation as to the number of men to be employed on a given machine, and it is not suggested that the unions in this industry have made any endeavour to restrict the introduction of new processes. Machines must be worked by fully trained members of one of the appropriate unions, and the rate of apprentices and improvers to fully rated men is low—one to five. Some of the work could undoubtedly be done by less skilled men, and, as has already been indicated (see p. 172), many employers feel that there is room for a grade of semi-skilled labour in the industry.

On the question of restriction of output the employers have a good deal more to say, but, from the nature of the case, it is difficult to supply concrete evidence proving that restriction has taken place. Complaints regarding under-production come from every district, but actual examples are rare. Several employers admit that their costing systems are too rough and ready to allow them to determine with certainty where the trouble is. In general the employers are convinced that the unions are pursuing a policy of slowing down production to the rate of the slowest worker to an extent which is definitely harmful to the industry.

The opposition to piece work is regarded as in itself providing evidence that the unions have adopted a “go

slow " policy, and the increased rate of production obtained by firms which have broken with the unions on this matter is advanced as proof that restriction does occur. A large firm gave it as their definite opinion that, after the War, " there was a deliberate policy on the part of most unions to restrict output in order to absorb surplus labour, which had flocked into the industry during the War without adequate training or qualifications." They added, " We don't get any limitation of output now. There are distinct variations in the earnings of the men "—due to a number of causes which they do their best to discover and remedy if possible. They are emphatic that, without piece work, they could not have developed as they have done both as regards business and as regards the social services which they provide for their workers.

In the upholstery shops it is stated that " output has gone down very considerably since the War." Employers say that for some time they have been conscious of attempts to limit the earnings on piece work, but the unions denied that it was done with their approval. In the recent negotiations, however, the unions have declared officially in favour of restriction, and they have endeavoured to secure the adoption of a rule to the effect that no worker shall be entitled to earn more than 55 per cent in excess of the minimum weekly time rate.

III. THE TRADE-UNION REPLY

The views set out in the following pages may be taken as representing the considered views of the unions, but it must be remembered that the extent to which it is practical politics to press these views is limited by the position of the employers as well as by that of the unions. The non-federated firms present a problem with which the unions feel that they cannot be expected to deal when the employers' federations are apparently powerless.

A. Recruitment and Utilisation of Labour. Employers in the industry are of the opinion that the restrictions imposed on the entry of apprentices and other " under the rate " learners are having a harmful effect, and that the unions are protecting their older members at the expense

of the future of the trade (pp. 170-71). In recent negotiations the London employers asked for a flat rate of one apprentice to every three journeymen, but they have not been able to secure any concession (p. 170). The unions point to the existing unemployment in the trade as providing a complete answer to the employers' contentions. Nor do they believe that there will be any shortage when trade improves. "The ratios have been fixed as a result of experience, and there has never been any shortage in my lifetime, not even in the most prosperous days," remarked one official.

Apart, however, from the question of ratios, the unions are not satisfied with the system of apprenticeship as it now operates. They find that some firms will not bother to train boys, and that in others the training given is insufficient. The boys learn one or two operations only, and need to go to other shops to fill in the gaps in their training. "There is no doubt whatever that there are thousands who are not fully qualified to do every job in their trade. In London the rent for a shop is very high, and the employers must have a certain output to pay for the bench room, and they won't have as many apprentices as they are allowed. There is not the same chance for the lad to be remunerative to the employer in these high-class shops."

Lastly, with regard to apprenticeship, the unions charge the employers with aggravating the difficulties by throwing half-trained lads on to the market. "You have a firm with, say, twelve cabinet-makers, and they have four boys. Trade falls off and they sack three men and a boy. When trade picks up again they take on three men and they take on another boy, but not the one they had previously. This means that there are a great number of partially trained boys in the trade, and they may go on to the market as qualified men." This applies in all sections of the industry, and the unions assert that this uncontrolled dilution has done great harm to the trade. They believe that it is the reason why the number of workers in the industry has risen in the last ten years from 83,000 to 133,000, and they feel that the employers should tackle this problem before complaining about the restriction on apprentices.

Connected with the question of a proper apprenticeship

training is the employers' demand for a grade of semi-skilled labour for machine work (pp. 171, 172). The unions cannot accede to the proposal that "in-and-outers" should be recognised as a separate class, as they strongly disapprove of this way of making use of juvenile labour (p. 171). They believe that the recognition of a semi-skilled class would increase the number of underpaid workers and the amount of shoddy work turned out. Admittedly the use of machines is increasing, and must increase, but, when a machine takes work from a craftsman, the operating of that machine should henceforth be recognised as a part of the work of that craft, and be paid accordingly. Take, for instance, the case of the spray which is now used for certain classes of french polishing work and to which the employers make reference on p. 171. The work is dirty and disagreeable, and the unions claim that it ought to be done by a fully qualified french polisher as part of his trade. Certainly it might be done by a semi-skilled man, but "spraying is part of the polisher's trade, and, if a whole lot of semi-skilled people are going to be allowed to do it, what is the craftsman going to do? He has invested his life in the trade, and everything he has is at stake." In the opinion of the unions, the craftsman is entitled to first consideration.

In regard to freedom of management in the economic disposal of labour, the employers bring forward two grounds of complaint. In London, the unions are said to make it difficult to employ non-union labour, even subject to the working rules. One employer cited the case of an excellent man whom he had been unable to keep because of the objections of the union (p. 172). The second point concerns demarcation problems. This is not a matter of first importance in the furniture trade, but in some districts it is said to make for trouble (p. 173).

With regard to the employment of non-union labour, the unions state that they do not attempt to dictate to the employers as to whom they should employ. They do, however, reserve the right to refuse to work with non-unionists. They believe that the best interests of the workers and of the trade are served by getting as many of the workers as possible into their organisations. They point out that such trade unions as those in the legal and medical professions are amongst the strongest in the

country, and they do not see that they can be blamed for attempting to follow their example. The employers have tried to strike a bargain, suggesting that they might agree to employ only trade-union labour if the unions in their turn would promise to work only for federated firms. Such a plan is unacceptable to the unions, since there are more firms outside the employers' organisations than within them.

The case of the ex-foreman who was refused readmittance to his union, which is set out on p. 172 the unions explain on the assumption that the man must have been a notorious blackleg. It is not their policy to put obstacles in the way of a man returning to membership, and the National Amalgamated Furnishing Trades Association has a carefully planned scheme to meet the needs of foremen, and others who advance to executive positions. Such a man can draw either a total or partial clearance—in the latter case he continues to pay a small subscription. In either event he is given a card which is his authority for securing readmittance to the union whenever he wishes. A man who has done something particularly outrageous may have to pay a fine, "but we insist that everybody must have a right to come back."

The employers do not bring forward any definite complaints with regard to demarcation barriers, but the suggestion put forward by one of their number (p. 173) is commented on by the unions. The upholsterers regard their craft as entirely distinct from other furnishing work, and the wood-cutting machinists do not encourage any interchange with the bench, though this used to take place. On the other hand, the National Amalgamated Furnishing Trades Association does not believe in rigid lines of demarcation. "So long as a man is given the appropriate rate of wage we do not mind who does the work." This union will not uphold rigid craft distinctions, but it will insist that the employer shall pay the standard rate of wage to whomsoever he chooses to employ on the job.

B. Hours and Wages. There are three outstanding matters relating to hours and wages in the furniture industry. With regard to the first two—overtime work and district variations in rates of wages—the unions find the present position as unsatisfactory as the employers,

though for other reasons. The third point concerns piece work, and on this matter there is some divergence of view among the unions themselves. The three questions will be reviewed in turn, but it is important to remember that they do not apply in the same degree to all sections of the trade or to all parts of the country. The evidence with regard to overtime is drawn almost entirely from London ; district rates of wages are obviously a general question ; while piece work is a matter on which the upholstery section holds different views from the rest of the trade.

During the recent negotiations the London employers endeavoured to obtain some concession with regard to the limits placed on the working of overtime. The unions used, in practice, to decide the amount of overtime which would be allowed, though the employers never admitted that they had the right to do this. The new rules for the cabinet section of the trade establish a compromise by which overtime for more than three consecutive days can only be worked with the permission of a Joint Committee of the Federation and the Federated Committee (p. 174). Some employers feel that this still constitutes an unjustifiable check on their freedom of management, on the grounds that the necessity or otherwise for overtime cannot be adequately judged by anyone who is not fully conversant with the detailed arrangements of the works in question (p. 175).

The attitude of the unions to the question of overtime is determined by the state of employment in the trade. " We endeavour, wherever it is practicable, to limit overtime, with the definite object of more workers being employed." The unions feel that they ought not to allow their more fortunate members to benefit at the expense of the others, and the men fully support this attitude. Where overtime cannot be avoided, the unions claim that they are reasonable ; " it is not our policy to hurt any of the federated firms by limiting overtime." Often the employer is in no way to blame for the fact that he is faced with a rush order, and the union will try to help him out of his difficulty. In the kind of situation of which the following is an example, overtime will not be unreasonably restricted :

" Recently, Messrs. H—— had to work overtime because they had a big order for a ship's furniture,

which had to be got ready in a short time. We feel that it would have been infinitely better if H——'s had been allowed to start the work earlier and employ more men. H——'s had the order a long time, but they did not get instructions to put the work in hand until a very short time before the ship-owners wanted delivery. All the ship-owners were concerned about was that, on a given date, they wanted the furniture to go on board. If they had used a little foresight and given H——'s longer to produce the furniture, it would have meant that a number of men who were out of work could have had two or three weeks' employment instead of the men in work having overtime."

When the unions take exception to the working of overtime, it is either because the employer could have avoided it by better organisation or because it is so constant as to amount to systematic overworking of an inadequate staff. In the latter case the unions will argue that the time has come to open a new shop, and to take on more people.

The unions are in agreement with the employers that variations in wages constitute a problem in the furniture industry (p. 175). "There is a great deal of difficulty in our industry owing to the different rates of wages in the different districts." But, while they agree that there are a number of anomalies in the existing rates, they are opposed to a national flat rate throughout the trade. They feel that this would operate unfairly on the workers, both in London and in small towns such as Barnstaple. A higher rate for London is justified because of the increased cost of living in comparison with provincial towns, and also because of the distances which the workpeople have to travel to and from work. "We have people who travel as far in London as the distance between different towns in Yorkshire. The workman's fare will probably average as much as 1s. a day in London, and, on the top of that, he cannot get home to lunch as he can in a small town." On the other hand, if a national rate of wages were established, small places like Barnstaple would have to give up making furniture. They could not carry the additional cost when they have already to meet the charges of assembling the materials at the factory, and then of sending out the finished product to be sold in some large town.

These objections to a national rate do not, however, preclude a reform of some of the existing rates. "With regard to High Wycombe, the London officials agree that there is too big a difference between the wages paid there and in London, particularly as the distance between the two places is so small that, with modern transport, a firm in High Wycombe can get their goods to the London shops almost as cheaply as a London manufacturer." The unions state that the real obstacle to any reform is the absence of a competent national employers' association. The employers seem to prefer the district system, and they will not assist the unions to remove anomalies. When, some little time ago, the National Amalgamated Furnishing Trades Association was pressing for a rise in the rates at High Wycombe they were unable to obtain any support from the London employers, though it would have been to the latter's interest to get the difference in the rates reduced (p. 175). Again, the unions aver that the Scottish employers refuse to consider their wages and working conditions in relation to those obtaining over the Border.

Piece work is a subject on which employers throughout the trade express strong opinions. They believe that its general adoption would be of great assistance, and instances were given of a number of firms who had left the federation on this question (pp. 175-76). Amongst the workers there is a divergence of opinion in the two principal sections of the trade. The upholsterers accept piece work as suitable for certain grades of work, while the rest of the trade is opposed to it in any form.

In the London area the upholsterers' agreement provides for piece work in connection only with the stuffing of furniture. There is a great deal of repetition in this work, and "where you have standardisation of production you have a fruitful ground for piece work." Drapery and lino-laying, on the contrary, the upholsterers do not consider suitable for payment by results, and it is not permitted, though it may take place in firms which are outside the control of both the federation and the union.

Even where piece work is in operation it is the policy of the union to set a limit on the earnings of the workers. The employers say that this is a deliberate attempt to restrict output (p. 178), but the union retorts that reputable firms have never objected, since they approve of the reasons

for which the limitation is imposed. "It is done so that we do not have cutting of prices. If we did not do this, a firm would get hold of a number of high-speed men, and this would result in displacing labour. We say that the limit allowed is one third over the minimum rate. If the piece-work price, which has been so heavily cut in consequence of the slump, fails to provide this amount, it is, therefore, wrong and requires raising." The upholsterers' union only accepts piece work in the London area, and subject to adequate safeguards. The price must be fixed by collective bargaining, and earnings controlled to prevent excessive speeding up.

Apart from the upholsterers, the unions in the furniture industry are opposed on principle to piece work. They believe that the continual speeding up has harmful effects on the workmen, and that the system is largely responsible for the decline of craftsmanship and for the shoddy, badly finished work which is now turned out. Under a system where the fastest man sets the pace, the slow worker, or even the average man, may find it difficult to make a decent wage. "Piece work shortens the life of a man." It places a premium on physique rather than on craftsmanship. One official remarked, "I am a craftsman, and, with my physique, if I were to go to a firm for a job they would take me before other men who had not the same physique. The employers would not know whether the other man was the better craftsman or not; but, because I looked the stronger man, they would think it would pay them better to employ me."

The unions assert that piece work not only leads to constant speeding-up, but also almost inevitably results in cutting of prices. "Employers tell you that they don't mind how much money a man earns at piece work, as it reduces their overhead charges; but, as soon as a man's earnings go up by increased output, the employers come along and say that they cannot afford this money, and down goes the price." The type of work for which the employers wish to establish a system of payment by results is "low-grade, shoddy work which is now being sold in the retail shops as furniture." The unions believe that this cannot but be detrimental in the long run to the best interests of the trade, and they are not prepared to lend any support to such a tendency. "There is hardly

anything in the world that some man cannot make a little worse and sell a little cheaper ; and the people who consider price only are this man's lawful prey."

And finally the unions wish to make it clear that they are not objecting to all differentials in earnings. They realise that some men are better workers than others, and they approve of the recognition of merit by increased payments above the minimum scale. Carvers, for instance, are rated according to their individual ability. Some can only do ordinary moulding, others are real masters of the craft, and there is a committee which decides what the rate for any particular man shall be. The unions fully approve of a procedure of this kind, because it gives the expert the recognition he deserves. What they object to is a system which sets one man against another, and of which the sole criterion is speed. They believe that the more reputable employers are in agreement with them, and one official told in illustration an incident which had been related to him by an employer :

"The employer got a new foreman, and he had a cabinet-maker who had been with him for many years. The new foreman saw the cabinet-maker changing his shop boots five or ten minutes before stopping time, had words with him, and sacked him. The employer heard what had happened, and took the man back again saying, 'A man who cannot spare five or ten minutes to change his boots is no damned use at all.' He knew that the cabinet-maker was an expert, the quality of whose work did not depend on five minutes here or there."

C. General Conditions in the Industry. The trend of development in the furniture trade during the last decade is viewed by the unions with some apprehension. They deplore the lack of national organisation, and are emphatic as to the danger from the price-cutting firms which stand outside the federations. In 1919 a Joint Industrial Council for the industry was formed, but the first attempt at negotiations on a national scale ended in disaster. There was a lock-out, in which the London employers alone refused to join. They stood by the agreement that they had made with the men, and broke away from the national

employers' federation. After the breakdown the employers reverted to district negotiations, and the unions feel that, in so doing, they lost a great opportunity. In the opinion of the men, the industry is greatly handicapped because there is no efficient national organisation on the employers' side, and they state that the district associations are often in opposition to one another. "Whenever I meet the employers in one district," said an official, "they are always complaining about the employers in some other district, yet they refuse to negotiate on any other basis."

Further, the unions state that the lack of common policy among the more reputable employers plays directly into the hands of their less scrupulous rivals. The federated firms have failed to preserve a common front, and some of them will actually buy furniture from the non-federated factories and then re-sell it as their own make. In these circumstances the unions feel that it is most unjustifiable, as well as untrue, for the federations to accuse them of indirectly encouraging the interloping firms by failure to insist on proper working conditions at their factories. As a matter of fact, the exact contrary is the case, for "our union has done everything we could, and we have spent many thousands of pounds in trying to get X—and other non-federated firms back into the federation."

Finally, the assertion made by the employers that their associations are losing members because of refusal of the unions to consider piece work is categorically denied (p. 176). "It is not true to say that firms have left the federation because they wanted to go in for piece work. Those who have gone out have done so primarily because they wanted to employ a lot of juvenile labour." These firms are mass producers of cheap goods, and they cut their costs by employing juveniles at low wages, and in greater proportion than is allowed by the agreements. Most of their work is done by machinery, and they have sub-divided each operation to such an extent that untrained boys can do the work. They have thrown out their skilled men, and "now, if they get a good job to do, they would have to sub-contract it out to someone else."

Undoubtedly these cheap mass-production firms constitute a real problem, but they would not have become so successful if the other employers had assisted the unions against them. "Reputable firms are suffering in

consequence of the anti-trade-union attitude taken up by individual employers since 1929. They have given licence to unlimited competition which is definitely damaging their own businesses. . . . In the wholesale trade the lack of unity among the reputable businesses, and the aid they have given to the disreputable firms in buying their products, has reacted on themselves. . . . In other words, Messrs. A. bought in goods from Messrs. B. in the same district, with Messrs. C. in a lower-rated district acting as factor for him, in order to secure a weapon against his own workers to force their labour costs down. The result is he has created a competitive force which is continually operating to cut prices still further." The unions do not suggest that they could have prevented this development entirely ; but they do assert that, with proper co-operation from the employers, the present chaotic and dangerous conditions could have been largely averted.

IV. SUMMARY

In summing up their impressions of the furniture industry, the investigators find themselves considerably handicapped by the diversity of conditions, and by the discrepancies which appear in the arguments of both sides. It seems clear that neither the employers' organisations nor the unions have succeeded in including within their ranks the majority of those whom they seek to represent. The various working agreements are not uniformly honoured either in the breach or in the observance, and, in consequence, it is difficult to assess the relative value of the evidence regarding alleged restrictions.

The unions' reply to certain criticisms appears to be well sustained. With regard to the limitation of apprentices, the rise in the total number of employees in the trade during the last ten years supplies a convincing argument to set against complaints of shortage. In this connection the experience of a large non-federated firm with an open shop is illuminating. "We abide absolutely by the limit, which is a very reasonable one. It is calculated rather nicely in order to replace men going out of the trade through death and so on, and it does prevent the exploitation of junior labour to a very large extent, which is necessary."

Again, the unions put up a reasoned argument in support

of the limit on overtime, holding that systematic working of overtime is indefensible, particularly when there is so much unemployment in the trade. They point out that overtime may be rendered necessary by lack of foresight on the part of the buyer, circumstances over which the manufacturer has no control, and they are prepared to agree to it where there is a good reason of this kind. The trouble arises over the question of what may be regarded as reasonable. The employers' argument, that a carefully organised plan of production cannot be suddenly altered to include a number of extra workmen for a short period, is a strong one, and the unions' answer is not convincing.

It is, indeed, on the whole question of modern methods of organisation and production in the trade that the trade-union argument breaks down. Mass-production methods in the furniture industry, as in others, have come to stay, and it is useless to condemn such methods wholesale on the ground that they result in "shoddy, cheap-grade stuff." Yet this is the gist of the unions' reply to the employers' contention that there is need for a grade of semi-skilled labour; it is the main argument on which they base their opposition to piece work. Their attitude seems to be that mechanical production on a large scale must mean the exploitation of juvenile labour, and cannot produce decent, well-made furniture.

While it is true that there is a number of "cut-price" firms in the industry, whose existence is deplored by the better employers as well as by the unions, that is no adequate justification for condemning a natural development. There is a general trend throughout industry towards increased mechanisation as a means of speeding up production; the unions cannot stop it, but they might do much to control its effects.

Undoubtedly the greater use of machinery does permit of the employment of juniors to the detriment of skilled or fully priced labour, but it does not necessarily have this effect. One of the largest manufacturers of furniture in the kingdom states: "We do employ a lot of unskilled men, but we pay them skilled rates"; and they find that it pays them to do so. Again, as regards piece work, it is true that, where speed is the sole criterion, both the worker's health and the quality of the work may suffer. But the unions' arguments are weakened by the defection of the

upholsterers, who consider that, "where you have standardisation of product, you have a fruitful ground for piece work." Mass-production methods provide just such a standardisation, and there is considerable force in the argument of the employer (his own firm is non-federated) who said, "I think, if I had anything to do with the unions, one of the things I would do would be to recognise piece work and have it under proper control, rather than let firms secede from the federation and use piece work just as they like. It would be better to have organised firms under proper control."

The unions do not admit that their opposition to piece work has amounted to a restriction of output, and has driven firms from the employers' federations. But there is evidence that piece work has increased production, and firms cannot adopt it and remain within the federations. On the other hand, there are firms whose methods are admittedly questionable, and the unions make a strong case to show that these are indirectly encouraged by manufacturers who ostensibly accept the agreed working conditions. The employers' organisations are weak, and they are not able fully to enforce the agreements into which they enter. This must detract from the force of any criticisms which they make. Some of them object to the high rates in their districts, but there is no agreed policy of reform. A national rate graded according to area, as in the building industry, is a possible solution, but it could not be established without adequate organisation.

It is evident that the furniture industry is suffering from a lack of control, which is against the best interests of employers and workers alike. While the recalcitrant employer is primarily a problem for the employers' federations, the unions could give considerable help. They have a great opportunity to take the lead, and, by frankly facing the problems raised by modern methods of production, to strengthen their claim to be regarded as responsible partners in the industry.

THE GLASS INDUSTRY

I. INTRODUCTION

THE CHIEF PRODUCTS of the English glass industry are flint-glass table-ware, plate and sheet glass, bottles, illuminated ware, and scientific ware. For purposes of convenience a division is often made between the glass bottle section and the other forms of manufacture, but the distinction, though useful, is to some extent misleading. The making of crystal or flint glass has been practised in England for many years, and, for over two centuries, English craftsmen have been famed for their cut-glass table-ware. In the course of their long history radical changes in methods have been few, and the craftsman is still of primary importance. Sheet glass and bottle making on the other hand, which are also old established trades, have during the present century been highly mechanised, and there is, consequently, a wide divergence between their methods and organisation and those which the flint-glass makers have evolved.

According to the Ministry of Labour returns, there were, in October 1934, 48,520 insured persons registered as being, or having last been, in the employ of firms in the industry ; of whom approximately one-sixth were women. And 20,060 of these workers, of whom 18·6 per cent were wholly or temporarily unemployed, were classified as belonging to the glass bottle manufacturing section. The average of unemployment for the rest of the industry was lower—11·3 per cent.

The industry is suffering, in so far as the luxury trade is concerned, from the general industrial depression. The manufacturers of the cheaper grades are faced by increasing competition from foreign countries, where the standard of living is lower and much of the decorating work is done by men and women working at home. One manufacturer produced some cut-glass trinket-bottles from Czecho-Slovakia which are sold in England at 18s. 6d.

a dozen, and stated that the same article cannot be produced here at under 36s. per dozen.

The organisation of the employers is still to some extent affected by the historical development of the industry. Glass making is traditionally a family business, and the employers have been slow to adopt modern forms of organisation or to combine among themselves. A national employers' federation was formed after the War, and it now covers about a third of the firms in the industry, including representatives of all sections save the sheet and plate glass manufacturers.¹ This last section consists practically of two powerful firms, which make their own arrangements, but co-operate with the employers' federation. Working conditions are largely determined by sectional agreements.

On the operatives' side the distinction between the older types of hand-made ware and the newer developments such as plate and bottle making, is reflected in the trade-union organisation. On the one hand, there are the descendants of the old craft unions, notably the National Flint Makers' Society and the National Decorators' and Cutter's Society; on the other, organisations such as the National Union of General and Municipal Workers which include the glass industry among their widespread activities. Somewhere between the two comes the National Federation of Glass Workers, often known as the "Glass Workers' Union."

The unions in the first group are small, and their membership is diminishing. It is estimated that the Flint Makers' Society, the Decorators' and Cutters' Society, and the New Union of Glass Workers and Kindred Trades (which caters for workers not included in the other two) cannot between them muster more than 1,500 active members.² They have declined as the nature of the industry has changed, and, though they still provide benefits for their members, they have little of their former power as industrial organisations.

The National Federation of Glass Workers claims to have more prestige, and to "negotiate all the wages and

¹ The glass bottle making section is now well organised, and the firms represented in the federation are responsible for from 80 to 85 per cent of the total output of glass bottles in this country.

² This estimate, and those which follow, relates to 1933.

conditions for the men in the glass works." It has, however, failed to bring the automatic machine workers within its ranks, and the total working membership of the four constituent unions does not exceed 1,600.

Other workers in the industry belong to a great variety of unions. Some are members of local glass makers' societies, some of the craft unions of the engineering and building industries, some of one or another of the general labour organisations such as the General Labour Union, and at one factory the workers are members of the National Union of Distributive and Allied Workers. Finally a considerable number of the workers are unorganised.

The division of the industry into sections, and the variety of organisations, does not conduce to centralisation. In 1920 a Joint Industrial Council was established, but this no longer functions, and the employers evince no desire for the regulation of labour conditions by national agreements.

II. THE EMPLOYERS' POINT OF VIEW

Employers in the glass industry point out that conditions in the different parts of the industry are very dissimilar, and that there is little in the way of trade-union action which can be classed as generally restrictive. This was not so in the past, and one after another refers to the difficulties with which his father or grandfather had to deal. Several of them admit that the fault was not entirely on one side, but they are unanimous in commenting favourably on the reasonableness of the present day unionist compared with his predecessor. There are some practices which they would like to see altered, and, in the flint-glass section in particular, there are customs hallowed by tradition which are quite unsuited to modern conditions. But these latter are often not so much trade-union rules as practices which have survived from the days when glass making was a handicraft industry.

A. Recruitment and Utilisation of Labour. Glass manufacturers recruit and train their labour in various ways. Firms which specialise in table-ware, and particularly in the more costly hand-made glass, take on boys as apprentices at either fourteen or sixteen years of age. They prefer

No

the earlier age, and a seven years' training, but, as some of the work has to be done on night-shift, it is often not possible to start the boys before sixteen, and then the period of apprenticeship is more commonly five years. At one period the unions used to impose a strict limit on the number of apprentices who might be engaged, and the supply of skilled men tended to be kept short. To-day there are several agreements with local glass workers' unions establishing ratios between apprentices and journeymen which vary, from one to five, to one to three ; but in other places there is no limitation.

The employers in this section have no complaint to make with regard to the attitude of the unions towards the apprentices, nor, in those cases where an agreed ratio has been established, have they suffered from any shortage. In two cases the policy of the union in demanding promotion strictly according to rotation, and regardless of merit, came up for adverse comment, but the chief criticism was directed against the Government. Manufacturers allege that they suffer from the regulation which prevents them from employing boys of fourteen on night-shift on occasion. They believe that a boy of that age is more receptive and easier to train than an older lad, and further that the boys who are available at sixteen are often the leavings who have failed to establish themselves in any other trade.

In the glass bottle section of the industry, apprenticeship is to all intents and purposes non-existent among the glass workers. Youths are generally taken on as assistants to the semi-skilled operators, and at first their duties consist simply of taking the bottle from the mould. As they become more experienced they learn other operations, until they become qualified to act as operators themselves. The employers have no difficulty in obtaining recruits, and there is no attempt to limit the number of youths taken on.

On the maintenance side in the bottle works, engineers are employed to make moulds, and bricklayers and masons for furnace building. These are skilled trades, and the firms train their own apprentices. No difficulty was reported with regard to the engineers, but in some instances the limitation imposed by the building trades was found to be irksome. Evidence was given of it being

overcome by bringing in the workers' relations—where a son is trained by his father, for instance, the boy is not counted strictly as an apprentice.

The sheet and plate glass manufacturers are in much the same position as the bottle makers. Most of their labour is semi-skilled, and the only craftsmen whom they employ in the actual process of glass manufacture are the cutters and bevellers. There is no limit set by the unions to the number of apprentices employed, and the number of recruits taken on is determined by the state of trade and the prospects for the future. No shortage in skilled workers for these trades has been experienced.

Demarcation disputes, the bugbear of those industries where craft unionism is strong, are comparatively rare in the glass trade. There is naturally a good deal of specialisation in those sections where hand blowing is still in operation, but this is necessary since the nature of the work permits of very little interchange. Amongst the semi-skilled and unskilled machine workers, specialisation of function is not carried so far, and for the most part the firms concerned reported that they were not troubled by demarcation disputes. One firm of bottle makers stated that craft rules sometimes operated unnecessarily and helped to slow down production. They instanced the case where an operator finds that his mould is binding, that is, not opening and closing freely. "The operator can take the mould off. Perhaps it only needs touching with a file to ease it, but it is considered a skilled operation to use a file, and therefore we have to have a skilled man in attendance all the time, whether there is work for him to do or not. (The operator is at best only classed as semi-skilled.) Probably on an average a full third of his time is wasted, because there is nothing for a skilled man to do." The firm concerned, however, added that, compared with other trades such as building, the glass industry is practically free from demarcation trouble.

B. Hours and Wages. Arrangements in the glass industry with regard to hours and wages are of two kinds. The maintenance workers—the engineers, builders, etc.—are governed by the national or local agreements appropriate to their trades. They work the recognised hours per week, and are paid the standard rate for overtime. In

one district, St. Helens, the glass manufacturers have their own local agreement with their engineering and building employees. This follows the national model in some respects, but variations have been introduced designed to bind the workers more closely to the glass trade, and to prevent them from becoming involved in national disputes which are really concerned primarily with other industries.

In contrast to the maintenance staff, the glass workers proper are, in most cases, employed on the shift system. The general arrangement is to have three sets of men working three shifts of eight hours each per day, with an extra shift on Saturday morning, and the result is that there is very little overtime at higher rates of pay. The average number of hours worked per week varies somewhat in different districts, but probably ranges between forty-two and forty-four. The one exception to the regular rotation of shifts occurs in the manufacture of high-class tableware and hand-made glass. There the necessity of a very high degree of accuracy and care in the preparation of the molten glass may prevent the exactness of time-table which is possible with the automatic processes. One important firm in this section, however, reported that they were able to organise "regular shifts of six hours on and six hours off, day and night, five days a week."

It is also found that glass which is hand manufactured does not lend itself to payment by piece rates. The work is too delicate and costly to be hurried. Great skill is required, and consequently the craftsmen generally receive a high weekly wage, averaging at one works from £4 5s. 0d. to £5.¹ At the same factory it is possible for these workmen to earn overtime money if more than the agreed number of articles are produced per "turn." The reason for this arrangement is said to be that the number fixed per "turn" is ridiculously low, but that there is no possibility of getting it improved except by the method of extra payment.²

In other sections of the industry different forms of payment by results are in operation. In many cases this takes the form of straight piece work, and there are forms of group bonuses in glass bottle works and in the

¹ The average weekly wage for all grades of glass workers in this firm was, in January 1933, 63s.

² See *post*, pp. 198-99.

sheet and plate glass works. The wages vary in different districts, and are generally fixed by local agreement, either with the appropriate union or directly with the workers concerned. The employers state that they have very little trouble with regard to the fixing of rates. When a rate is being revised, the men may tend to work slow, but this they regard as due rather to the natural reaction of human nature than to any policy advocated by the unions.

C. General Conditions affecting Output and Efficiency. In those sections of the industry where glass is produced mainly by mechanical means there is very little complaint from the managements concerned regarding the conditions under which the machines are operated. In several cases reference was made to the obstinacy of the old hand-workers, and their refusal to adapt themselves to changing conditions, an attitude which has had the effect of hastening the change to automatic processes. One employer said :

“Two years ago I offered our men a guarantee of three years’ regular work if they would give me a reduction in wages whereby I could sell stuff at a profit. They would not do it. They are really doing themselves out of work, because we are having to introduce machinery.”

The firm in question is a small one, but its experience is typical of what has already taken place in many of the larger works. The local glass workers’ unions are said to have encouraged the men in their obstinacy, but the time when that attitude could have any seriously restrictive effects on the progress of the industry is now past. The unions do not try to interfere with the machine workers to anything like the same extent, and employers generally state that they are free to staff and to run their machines as they think best.

Similarly, with regard to output the employers in these sections of the industry have no serious complaint to make. On some processes, output is regulated by the capacity of the machine, and in those departments where piece work is in operation the variations in earnings are good evidence that there is no general attempt to set a limit on production.

Amongst firms which specialise in hand-made glass, particularly table-ware, the position is different. Several employers are definite that output is restricted by the refusal of their workers to abandon obsolete traditions and customs. The following statement by a leading manufacturer illustrates the difficulties with which the employers have to contend :

“ The men want to stick to the old numbers of articles which we made a generation ago—that is, the numbers made per turn or shift. The men have for generations made a certain number of pieces per turn of six hours, minus food times, and a little allowance for getting ready and finishing.

“ From Tuesday morning to Friday night or Saturday morning, the men work six hours and then have six hours off, through the day and night. In the turns they are supposed to make a certain number of pieces of any particular article, and the custom has been in some places that they have left off as soon as they have made that number, which, of course, means a big loss to the manufacturer, because the furnaces are lying idle during the interval between them leaving off and the next men starting.

“ Sometimes they will go on making and make towards their week's output, which is added to their total at the end of the week, and this is called overtime, and they expect to be paid at a higher rate. The men are paid a sort of bonus.”

Employers find it very difficult to get the men to agree to any change in these old numbers. One firm which makes ordinary plain wine-glasses for hotel use explained that the number per shift, or “ chair,” had been fixed many years ago at 160. To-day a small chair frequently makes 200 “ without working hard ; while in the case of the night-shift, instead of making more, they will frequently stop working at the end of four hours and go home, having got their correct numbers.” After prolonged negotiations the firm has at last got the number raised—but only to 170.

In the two instances quoted above, one firm is employing non-unionists and the other union labour. This would suggest that these restrictions are due primarily to the

conservatism of the craftsman and his adherence to past traditions, a conclusion which is supported by the opinion advanced by several employers that the trade-union leaders have become much more reasonable of late years. In any case, the problem only affects one section of the industry, and it is suggested that it will become steadily less urgent as the demand for expensive hand-blown glass diminishes.

III. THE TRADE-UNION REPLY

The workers in the glass industry are served by a variety of unions (p. 192), and on one of them can be said to represent views which are common to the operatives as a whole. The craft unions have lost their former power, and there is no longer the same unity among the workers. When it became clear that there was a growing class of workers for whom the older unions did not provide, the National Federation of Glass Workers attempted to make their organisation a focus for all grades of operatives. The attempt has been a failure.

The National Federation is of the opinion that the reason for their failure is that the employers were determined to prevent the organisation of both hand and machine workers within a single union. As an example of action with this end in view they cited the following case :

“ In 1920 there were 150 machine men in a factory at who became members of the Glass Workers' Union, and immediately the firm discharged them. They could easily get other men they could train on the automatic machines. The union was left with the responsibility of looking after these men and paying their benefits, and eventually had to say to them that it was impossible for the organisation to do anything more in the matter, and to advise them to leave the union, and to try to get their jobs back.”

On the other hand, division between the hand and the machine workers has also been promoted by the general labour unions. The National Union of Distributive and Allied Workers has a working agreement with the National Federation of Glass Workers, but the Municipal and

General Workers' Union has not. The glass workers feel that this weakens their position, for "if we are going to maintain any semblance of craft unions we must organise by federations."

The National Union of General and Municipal Workers does not appear to be impressed by the necessity for preserving the craft unions in the glass industry by promoting any form of combination. They state that their relations with the employers are excellent, and that "we have always managed to get what we feel to be a square deal." They observe that the points brought forward by the employers do not really concern their members, and they are not prepared to comment on issues which are confined to other workers. In the circumstances, the "Trade-Union Reply" necessarily consists of the views of only a portion of the workers.

A. Recruitment and Utilisation of Labour. Apprenticeship obtains only in the table-ware section of the trade, among those firms which still produce hand-made and hand-decorated and engraved glass (p. 193). Both employers and workers find the system satisfactory, and, where there is an agreed limitation of recruits, no question of shortage has been raised. Two employers comment on the insistence that promotion shall be according to rotation (p. 194), but this is said to be a rule of the Flint Workers' Society only. None of the other unions have any such regulation, though the Glass Workers' Union has a rule providing that an unemployed member of the grade required shall have preference, if he is available.¹ In effect, however, the unions assert that promotion is left entirely to the employers.

The only other point under this head to which attention is drawn by the employers concerns the question of running repairs (p. 195). It is said that in certain works a craftsman has to be kept to effect minor repairs to the machines, which the operator could quite well carry out if they were not considered craftsman's work. Two explanations are advanced by the unions. One is that the employer will often say: "Don't interfere with the machine. It is a mechanic's job, and you might spoil it." The other argues the matter from the opposite end, on the ground

¹ National Glass Workers' Trade Protection Association, Rule 31.

that, if there were not some such demarcation line, the glass workers would soon be saddled with the whole of what should be maintenance work. In any event, both employers and unions regard the matter as of minor importance.

B. Hours and Wages. There is no national hours or wages agreement in the industry (pp. 195-96). The existing arrangements meet with little criticism from either side, though one union states that attempts are being made to extend piece work, "which cannot be regarded as really satisfactory." Apart from that, the unions have no comments to make, except as regards one example cited by the employers.

This example is given on p. 197, as an illustration of the obstinacy of the hand workers. The men concerned refused to accept a reduction of wages, even though it was accompanied by the promise of a three years' contract of employment. A union official remarked that he knew of a similar case, though, in the absence of specific information, he could not be sure that it was the same as that to which the employer referred. In the case of which he knew, the men were already being paid at 25 per cent below the recognised rate, and, moreover, the whole dispute was used as a pretext for getting rid of the keen unionists among the workers.

C. Other Conditions. According to the employers, there is very little restriction of output in the industry, except that which arises from obstinate adherence to old traditions and customs (pp. 193, 198). The unions reply that they are convinced, with employment as precarious as it is, the men work their hardest in the hope of retaining their jobs. It is the new methods rather than the old which trouble the Glass Workers' Union.

The use of machinery in the industry has increased greatly of late, and the Glass Workers' Union is much exercised by the unemployment which this has created. "There is one machine in Castleford which has displaced 100 men. It works continuously, employing three men per shift. At least 100 men would have been required a few years ago to turn out the work that is now done by nine men. . . . And in Great Britain there are twenty-seven of these machines working. In addition, there are numerous small machines, at least 200, which dispense

with from ten to forty men each." The result is, to take Castleford as an example, that, where in 1920 the union had over a thousand members employed, it now has no more than thirty in work.

IV. SUMMARY

For the most part, both employers and operatives testify to the good relationships which exist within the glass industry,¹ and the former have very little to say on the subject of alleged trade-union restrictions. Mention is made by individual firms of difficulties which they have encountered with regard to promotion and the repair of machines, but there is no suggestion that these are serious, or of general application throughout the trade. The only point of importance appears to be the deliberate restriction of output which the hand workers are alleged to practise. The evidence on this point is strong, and is not really contested by the unions, but the employers themselves ascribe it rather to obstinate adherence to traditional customs than to modern trade-union policy.

The investigators believe, therefore, that it may fairly be said that the industry is not hampered by trade-union action. Nevertheless, they were considerably impressed by the comparison which many employers drew between present conditions and those obtaining a generation or so ago. During the closing years of the nineteenth century, according to the employers, the glass industry suffered very severely from trade-union restrictions. At that time the workers were so strongly organised that it is said that "among the Midland flint-glass makers . . . and the Yorkshire glass bottle makers, non-unionism was practically unknown."² A determined stand by one or two leading employers and the introduction of mechanical processes into the trade combined to weaken the unions, with the result that, as one official put it, "to-day the glass unions proper are rapidly approaching Queer Street." Organisation of the workers is falling into the hands of the general labour unions, whose interests and outlook are entirely different from those of the old craft societies.

¹ In particular, workers in the plate glass section describe their employers as "the best and most progressive in the country."

² Webb, *History of Trade Unionism*, 2nd edition, p. 428.

The connection, if any, between the decline of the craft unions and the disappearance of restrictive practices is a matter for the final chapter. But it is desirable to point out here that the form in which labour in this industry will be organised is a matter of some doubt. It is not at all clear that the glass worker of the future will find any organisation devoted exclusively to his trade.

THE IRON AND STEEL INDUSTRY

I. INTRODUCTION

THE HEAVY INDUSTRIES of Great Britain, coal, iron and steel, engineering and shipbuilding are closely interconnected. During the first decade of this century there was a strong movement towards vertical amalgamation amongst the basic trades, a process which was resumed after the War with the result that there are now a number of great combines which virtually control the whole process from the production of the raw materials—iron ore and coal—to the marketing of the finished product in the form of machinery or ships.

The iron and steel industry, therefore, as a result of the modern trend towards financial amalgamation on an ever increasing scale, is becoming steadily more and more closely interlocked with those other basic industries with which it has natural affinities. Nevertheless, it has at the same time preserved and strengthened its own position as a separate industry with a highly developed internal organisation. The connection with the other heavy trades, which is particularly strong in certain districts (e.g. Sheffield, where many firms combine steel production with one or more forms of engineering), is not without effect in the organisation of the industry, but it is never allowed to obscure the basic unity of the iron and steel trade.

In this country, iron and steel manufacture is largely concentrated in definite areas, on Tees-side, Tyneside and Clydeside, in Sheffield, South Wales, and the Midlands. The first three districts are concerned almost entirely with the heavy steel trade and with the production of pig iron. South Wales is the headquarters of the tinplate industry, and the Midland area deals mainly with malleable iron. The Staffordshire sheet trade, now that sheets are rolled from steel, forms a separate section. The steel industry in Sheffield has peculiar characteristics. It is

closely connected with engineering, and the manufacture of machines and tools, and, in consequence, has little in common with the "bulk steel trade." It may more properly be regarded as a separate industry, with different methods and organisation.

According to the Ministry of Labour returns in October 1934, 303,930 insured workers registered as being, or having last been, in the employ of firms engaged in metal manufacture. Of these, 168,040 were engaged in steel melting and iron puddling, iron and steel rolling and forging; 16,370 in the blast furnaces; 28,920 in the tin-plate section; and the rest in such ancillary occupations as iron and steel tube making, and the manufacture of wire, wire netting, and wire ropes. The industry is suffering heavily from unemployment. At the same date, 22·9 per cent of the iron workers and 23·6 per cent of the steel workers were permanently or temporarily unemployed. To put the position in another way, only about 70 blast furnaces were working out of a total of 300 odd.

Both employers and workers in the industry have powerful organisations, which, on the employers' side particularly, to some extent follow the sections into which the trade is divided. The largest organisation of manufacturers is the Iron and Steel Trades Employers' Association. This body, which represents the heavy steel interests, has been built up by merging a number of local associations of steel manufacturers. There is, however, a national organisation dealing with commercial matters for the whole industry, namely the National Federation of Iron and Steel Manufacturers. Membership is open to the ironmasters, who are also organised on a district basis—for instance the Cleveland Iron Masters' Association which serves Tees-side—but have not as yet a national federation of their own. In Wales there are the South Wales and Monmouthshire Steel Manufacturers' Association and the South Wales Siemens Association, representing local interests. In Sheffield (owing to the close connection with the engineering industry) the steel-making firms belong to the Engineering and Allied Employers' Association, and not to the Iron and Steel Trades Employers' Association.

The most important workers' organisation in the industry is the Iron and Steel Trades Confederation. This body came into existence in 1917 through what was in effect

an amalgamation of the chief unions in the industry. The principle on which it is organised is "that every man who works in or about an establishment should belong to the same union. . . . Our organisation really starts at the production of the ingot, and goes right through the industry to the final stage of the finished commodity." The only important class of workers to remain outside the Confederation is the blast furnacemen, who are organised in the National Union of Blast Furnacemen, Ore Miners, Coke Workers and Kindred Trades. This organisation covers the furnacemen in England and Wales, while those in Scotland belong to the Confederation. Apart from these two there are groups of men engaged in maintenance work connected with the craft unions, while in the finishing end of the galvanised sheet trade and the tinplate trade the workers are members of the Transport and General Workers Union.

For all practical purposes, therefore, the two unions, the Iron and Steel Trades Confederation and the National Blast Furnacemen's Association, represent the workers in the industry. About 10,000 of the 18,000 insured workers in the pig iron trade are members of the latter body, but the proportion of trade unionists among steel workers is not so high. The membership of the Confederation to-day is approximately 43,000, less than half the total membership just after the War. The main reason for this falling off in numbers is to be found in the long-continued period of depression through which the industry has been passing, and it is claimed that if times were normal the membership should stand at about 80,000. According to the union leaders, 85,000 would "represent 95 per cent of the organisable men in the various productive departments and branches."

The strength of the unions is said to contribute very considerably to the harmonious relations between employer and employee which characterise the industry. There has been no serious strike or stoppage for a great number of years, and the reason, according to a leading employer, is "because we have the best methods of negotiation and conciliation of any industry in the country." Moreover, the trade has proved itself capable of utilising this machinery without resort to stoppages of work or to outside interference. Such satisfactory results could not be

obtained without real co-operation and a full appreciation of the best interests of the industry, and it is therefore not surprising to find a large measure of support among the employers for the statement made by one of their number that "the Iron and Steel Trades Confederation is the best, the most intelligent, and the most ideal trade union in the country."

The conciliation machinery set up by the industry takes slightly different forms in different sections. There are three main systems in operation—Joint Conciliation and Arbitration Boards, Joint Conferences of employers' and workpeoples' representatives, and Joint Industrial Councils. Each of these is composed of representatives of the employers' associations and of the unions, and, while they vary in details of procedure and form, the objects in each case are substantially the same. The following extract from the rules of the Midland Iron and Steel Wages Board, one of the oldest in the country, illustrates the policy generally adopted :

"The objects of the board shall be to discuss and, if necessary, to arbitrate on wages or any other matter affecting the respective interests of the employers or operatives, and by conciliatory means to interpose its influence to prevent disputes and put an end to any that may arise."¹

Incidentally, it may be noted that the decisions of this board are final, and no provision is made, as is done by some of the other boards, for reference to an outside arbitrator in the final instance.

The principal joint industrial council is that existing in the tinplate trade. In constitution and procedure it resembles the conciliation and arbitration boards, but provision is also made for the consideration of matters affecting the trade commercially and technically, the status and welfare of workers, and other questions.

The heavy steel trade, while having in view the same objects as the other sections, has devised a rather more elastic form of machinery. There is a central joint committee consisting of representatives of the employers' Association and the Confederation, which has no fixed

¹ Rule 2.

procedure, but meets whenever occasion requires. The function of this body is primarily to deal with matters of national import affecting the heavy steel industry. Local disputes are first discussed by the management and the men's representatives at the works concerned. If they cannot settle within their powers, which are to some extent limited by the rules of both sides, then the matter is referred to a joint neutral committee consisting of representatives of employers and workpeople from works not connected with the establishment where the dispute has arisen. It is nearly always possible to reach a settlement at this stage, but, if necessary, there is provision for reference to a specially convened joint conference, and finally to arbitration.

Besides settling disputes, the central joint committee in its full form, with delegates from each district, is the negotiating body for any new agreements in the trade. One of its biggest pieces of work was the formulation, in 1928, of standard melting rates for the various classes of furnaces. Prior to this, each works had had its own scale, but the joint committee was able to produce agreed standard rates for England and Scotland.

One other aspect of the conciliation methods of the industry deserves mention. The trade, of course, includes a considerable number of maintenance workers, such as electricians, builders, fitters and turners, who are members of their own craft unions and not party to the ordinary agreements of the iron and steel industry. These men remain members of their appropriate craft unions, which have special sections for their workers in iron and steel works. To meet the entirely different hours and conditions of work the unions have made separate agreements with the iron and steel employers in the North East, the Midland and the Scottish areas. The agreements vary in detail—in some cases, for instance, though not in all, the craftsman is paid a production bonus—but the basic principle is substantially the same. The essence of all these agreements is that they are completely separate from the general agreements of the crafts concerned, so that the maintenance workers in the iron and steel industry are not liable to be drawn into disputes with which their crafts may be concerned in other industries.

II. THE EMPLOYERS' POINT OF VIEW

A. Recruitment and Utilisation of Labour. There is no apprenticeship in the steel trade proper, though there is of course among the engineers and maintenance workers. Only one union puts any limit on the number of boys and youths taken on, and this limit is said to be "very generous." Boys, when they enter the trade, are first put on to simple labouring work, and gradually learn by experience and so qualify for more responsible jobs.

In some works which specialise in certain forms of steel work, such as steel castings, skilled men have to be employed. In the foundry there may be, for instance, pattern makers, moulders, fitters, and turners, and for these trades an apprenticeship must be served. The employers concerned do not complain of any undue limitation of recruits, and they have very little demarcation trouble. The only actual case offered in evidence was one which occurred ten years ago, between the core makers and the moulders, and it was cited merely to point out the satisfactory solution which was reached. The two trades were practically interchangeable, and so the two unions amalgamated. Amongst the steel and iron makers the employers state that there are no demarcation disputes.

In those cases where craftsmen are employed, the employers sometimes have difficulty with regard to the promotion of unskilled men. They have a system of up-grading, but it is not looked on with favour by the unions, and, lacking their co-operation, can only be partially administered.

B. Hours and Wages. The fundamental necessity of maintaining intense heat requires continuity of operation, and means that the great majority of the operatives work in successive shifts throughout the week. Work is therefore organised on a system of three eight-hour shifts. In the steel trade there is a week-end break: in the melting shops from 1 p.m. on Saturday until 2 p.m. on Sunday, and in the rolling mills from 1 p.m. on Saturday until 10 p.m. on Sunday.

In the pig iron trade, on the other hand, production is continuous, and there is no week-end break. The general rule is that a furnaceman will work seven shifts in the week,

and will be paid as though he had worked seven and two-thirds shifts. Should a man not be relieved at the end of his shift, he must go on working until his mate turns up or a substitute is found, and for the extra work he will be paid at the rate of time and a half. In some districts it is recognised that the men have a right to ten days' holiday in the year, but, since it is not always possible to give this, they are paid ten days' holiday rate—a day and a half's wages per day.

The maintenance workers and the various tool makers, spring makers, and so forth, have the recognised working week for their craft, and are paid overtime for any extra work. Occasionally the men may be difficult if overtime is required for a rush order. One firm reported trouble of this kind with their fitters, but the general run of the evidence suggests that the men are very reasonable with regard to overtime in most cases.

Iron and steel making is largely a piece-work industry—either straight piece work or a fixed time rate plus a bonus on production. Wages in the blast furnaces depend on the selling price of pig iron, and in the steel works they are regulated each quarter according to the selling price of the principal trade commodity in each section. A leading employer in the Cleveland district estimated that the wages of steel workers in January 1934 averaged a little under £3 per week, while in the same area, apart from labourers, the furnaceman's minimum rate was 39s. per week. Actually, the usual rate of payment was 46s., and, with the bonus system in operation, the latter's wages probably average out at only a little less than those of the steel workers.¹

The method of fixing wages according to the selling price of the product can be illustrated by reference to the blast furnaces. "The base rate for Cleveland pig iron to-day is 54s., and at that price the men receive no percentage, but for every 1s. per ton above 54s. the workers' wages are advanced 1 per cent. The selling price of Cleveland pig iron to-day is below the minimum, but the workers are still receiving the base rates. The employers are

¹ In the statistical bulletin of the National Federation of Iron and Steel Manufacturers, the average weekly earnings per head, according to the returns from 150 firms, employing 79,097 workpeople, were, in October 1932, £2 14s. 10d.

entitled to go below the base rates, but they felt that the conditions of the men to-day were such that it would be unwise to go below the rate."

C. Manning of Machines and Restriction of Output. With regard to the vexed question of the increasing use of machinery, the attitude of the workers can be best epitomised in the words of an employer. "The Iron and Steel Trades Confederation made it one of their tenets, and stick up to it, that they cannot prevent the march of progress." They never oppose the introduction of new machines, though it may mean that men are turned off, but they do claim an equal voice in deciding how many men are needed to run the machine.

The usual procedure adopted to settle a question of this kind is that described on p. 207-8. If the management and men of the works concerned cannot come to an agreement, it is referred to a neutral committee of masters and men, and their decision is accepted. With one exception, the employers are agreed that a satisfactory compromise is almost always reached, and they state further that any additional profits accruing from the new facilities is shared between themselves and their workers.

In the one exception just mentioned, the firm concerned estimate that 20 per cent of their men are redundant, but they are compelled to employ them because the unions insist on an excessive number of men per machine. They state further that, whenever new machinery is introduced, the men affected demand an addition to their rate which swallows up the benefit which might reasonably be expected to accrue. This instance, however, is completely at variance with all the other evidence received.

Since so much of the work is done on piece rates, employers are of the opinion that there is little room in the industry for organised restriction of output. In many cases, also, output is governed by the pace of the machine. The employers believe that, though an individual may occasionally go slow, the men as a whole give of their best, and they express themselves as entirely satisfied with the output they obtain. The usual custom is for masters and men to agree beforehand on an assessment of production for a furnace or a machine, and the bonuses are reckoned on that basis. If the assessment

has to be altered, there is rarely any trouble about it. Some firms extend the system of bonuses to the maintenance workers. The method is to pay them a percentage calculated according to the average output of the whole works.

III. THE TRADE-UNION REPLY

The employers point out that the iron and steel industry is noticeably free from trade-union restrictions, and there is very little in their account which calls for direct reply. The emphasis laid on the cordial relations existing within the trade, and the adequacy of the machinery set up by joint agreement to meet any problems which may arise, is fully confirmed by the workers' representatives. In the following pages, working conditions, as described by the employers, are reviewed from the standpoint of the men.

A. Recruitment and Utilisation of Labour. The unions take great interest in matters of staffing and promotion, believing that, with their knowledge both of the men and of the work, they can make a real contribution towards solving any problems which may arise. They stand by the principle that, other things being equal, promotion should be by seniority (p. 209). The test should be "length of service with the company plus ability to do the work. . . . Unless there are legitimate grounds for the employer saying a senior man is not competent to take the better job, we oppose the appointment of a junior man. So long as there are men qualified for the job, we say that the senior man should be taken. The final word is supposed to rest with the management, and we very rarely, not once in a hundred times, have any difficulty about it." Each case is considered on its merits, but the men feel that they go into the trade with the expectation, if they do reasonably well, of gradually climbing to a better position. They look on the seniority rule as safeguarding, not inefficiency, but the chance which every man should have of progressing, provided he works reasonably and well.

In the general work of the industry—that is to say, in the production departments of iron and steel and its manipulation—there are no strict lines of demarcation and no formal apprenticeship. Lads coming into the works are put on to simple jobs such as driving light cranes in the

rolling mills. They are transferred to more responsible work as opportunity occurs. In many cases the work is done in gangs, and lads will get opportunities of taking by-turns—that is, supposing a man is taken ill, the other men fill the vacancy by moving up and thus leave the lowest-grade job for a lad to come in and do. In this way, promotion depends on experience, coupled with seniority. Of course, should a man or boy prove incompetent, the unions would agree to his being passed over. The only bar which the Confederation recognises concerns those trades for which a definite apprenticeship is necessary. “In the work of skilled craftsmen an apprenticeship is recognised, and we should not take up any other attitude than to say that it seems to us a very proper thing.” The proportion of skilled trades within the industry, however, is not large, and the method of progress by experience is much more common.

Questions sometimes arise as to the number of men needed for a given process, or to work a certain machine (p. 211). The general practice is to settle the number by mutual agreement. “The employers may say that a new furnace can be staffed with four men. We say, ‘Not likely; we want six men.’ And then we argue the thing out, and come to a mutual arrangement. Broadly speaking, you can say that the staffing of a furnace is based scientifically on the amount of work that is actually to be performed.” The unions take an intense interest in all such matters. “You can take any plant in the country, and you will find that the trade-union officials will be in this plant on the average fifteen to twenty times in the year, seeing the works manager, and often at his own request because he has some particular problems upon which he wants assistance.”

B. Hours and Wages. With regard to wages, “the whole tendency of the industry is towards piece work.” “Our policy is,” stated an official of the Confederation, “that, wherever a man in any occupation can affect production, he should participate in the benefits of increased production, and our rates of wages are designed for that purpose. In the case of the higher and more skilled occupations the payment is on tonnage or straight piece work. With the semi-skilled it is the datal rate, and a tonnage bonus.

Even men in the maintenance grades, at any rate in the heavy-steel sections in the north of England, have an output bonus, and can earn above their standard rates according to a sliding scale."

In the blast furnace trade there is generally a special form of piece work. "The men are paid a day wage, plus a sliding scale, and plus a payment on output. The output payment is on each furnace individually. We find out what the capacity of the furnace is, sometimes by trial over a period. I think it would be fair to say that we test and agree on the output of the furnace, and then regulate both the staffing and the wages accordingly. The bonus payment is fixed to commence at a point equal to from 50 to 66 per cent of the normal output.¹... When we get the output of the furnace increased by more than 15 per cent above the normal, there is a revision of the assessment, and it is fixed at $7\frac{1}{2}$ per cent higher than it was before. Thus the increase is shared as 50-50 between the employers and the men."

The sliding scale, referred to above, which also operates to regulate wages, depends on the selling price of the product. While the steel workers are satisfied with this system, the blast furnacemen feel that it operates unfairly in their section of the trade. "Whereas iron to a large extent before the War was made for sale, put on the market for sale, and sold at whatever price could be arranged between the merchant and the producers, to-day probably eight-tenths of the pig iron produced is going to steel works, to be used for the production of steel, and our wages are being regulated by the spill-over from steel production." The great increase in the output of steel in this country during the War could not be accompanied by a corresponding increase in pig iron production. As a result, pig iron was diverted from its other uses to feed the steel works, and it has not recovered its former position.

For these reasons, and others, the workers contend that the selling price of iron is no longer a reliable guide to the prosperity or otherwise of the trade. "The profit very often depends on the price of raw materials. If the cost of coal went up by 1s. or 1s. 6d. a ton, it would affect the price of coke, and the price of coke would affect the cost of making pig iron. It takes one and a half tons of coal to

¹ Over the whole of the north-east coast it is 50 per cent, on the west coast 66 per cent.

produce a ton of pig iron. If coal went up 1s. a ton, it would cost the employer 1s. 6d. more to produce a ton of pig iron. If coal came down 2s. a ton, that would mean that the employer would be able to produce his pig iron at 3s. a ton less than before, and, if he sold his iron at a reduction of 3s. a ton, that would mean from 3 per cent to 4 per cent off the blast furnacemen's wages, although the employer would make the same profit." Iron has lost its relative position among commodities, and has become an adjunct of the steel trade. Often, indeed, the furnaces are owned by steel makers. To-day pig iron is being sold at below pre-War prices, which suggests that it is not a reliable standard by which to fix wages.

C. General. In conclusion the unions draw attention to the serious decline of the industry since the War. Foreign competition in world markets has greatly increased, and it is significant that Great Britain's chief rivals have increased their output while hers has remained stationary. While protective tariffs may do something to assist the trade, the Confederation is of the opinion that "all experience goes to show that nothing short of a national planning and conscious control of the industry will meet the situation." In April 1933 the employers communicated to the Government, in accordance with the recommendations of the Imports Duties Advisory Committee, a scheme of reorganisation. In a covering letter they pointed out that this "may perhaps be more properly described as a scheme for establishing the machinery whereby a reorganisation of the industry may be carried out, rather than a scheme of reorganisation itself."¹ The unions are anxiously awaiting further progress and concrete proposals for reform. They have many and interesting suggestions to make, but an examination of these is not relevant here.

IV. SUMMARY

Of all the industries which are under review in this volume, the iron and steel industry takes pride of place. The employers are not content merely to state that restrictive action by the trade unions is non-existent; they go further and speak in the highest terms of the way in which

¹ See *The Times*, April 7th, 1933.

the unions are conducted, and the part they play in furthering the interests of the industry. One employer says: "I should like definitely to state that so far as our business is concerned the trade unions have always been most helpful. . . . During the difficult times through which we were passing a few years ago, at a meeting with our men and their representative, the men agreed to sacrifice 25 per cent of their production bonus to help the firm, and this enabled us to start our plant up." The progressive outlook of the unions is particularly noticeable in regard to the vexed question of the displacement of man-power by machinery, and this one point appears to be typical of the whole trade-union policy.

In part, no doubt, this very satisfactory state of affairs is the result of wise and far-sighted leadership on both sides. But the industry has not been content to depend entirely on the high abilities of individuals. Machinery for negotiation and conciliation has been carefully devised, and this is described in some detail earlier in this report (pp. 207-208). It appeared to the investigators that such a description might be of value when attempting to assess the reasons which may account for the great variations in the extent to which the industries are affected by trade-union restrictions. At least there can be no doubt that the machinery set up by the iron and steel trade has proved exceptionally successful in its own sphere. Many statements to this effect were made during the course of the inquiry, of which the following, from an official of the blast furnacemen's union, is typical: "The independent arbitrator has not been called upon during my memory, and that is going back for more than thirty years. So our machinery has not even been pushed to the limit of its possibilities, and all of us in the industry are proud of our record."

THE PRINTING INDUSTRY

I. INTRODUCTION

THE WORK OF THE PRINTING INDUSTRY is of two kinds : jobbing or general printing, and newspaper production. Many firms deal only with one branch of the trade, but there are offices where the production of local or weekly papers is combined with general printing work. On the newspaper side there is a further division. The great national newspapers which have their headquarters in London occupy a special position, and the provincial Press, both employers and workers, have more in common with the general printers than with their fellows in London.

Printing is a sheltered industry, and one which has suffered comparatively little, in relation to many other industries, from the general industrial depression. According to the Ministry of Labour return there were, in October 1934, 279,730 insured persons registered as being, or having last been, in the employ of firms engaged in printing, publishing, and bookbinding, of whom 8·6 per cent were wholly or temporarily unemployed. The industry is noticeable for the high degree of organisation which characterises both the employers and the workers,¹ and the proportion of the trade which has not been brought within one or another of the various organisations is negligible.

On the employers' side, the Newspaper Proprietors' Association is concerned only with the London "national" newspaper trade ; proprietors of provincial newspapers belong to the Newspaper Society. In general printing, the employers' organisation is the British Federation of Master Printers. The Newspaper Proprietors' Association makes its own agreements with the men, but the other two usually act together.

The employees are organised in a number of trade unions covering the different sections of the trade. There

¹ The National Society of Electrotypers and Stereotypers, for instance, claims a membership of "about 94 per cent of the total number of electrotypers and stereotypers in England, Ireland, Scotland, and Wales."

is very little overlapping, but in some respects workers in London are organised rather differently from those elsewhere. In London the compositors belong to the London Society of Compositors; in the machine room there is a small union for machine minders, but the large majority of the men belong to the National Society of Operative Printers and Assistants. The publishing and dispatch departments are covered by the National Union of Printing, Bookbinding and Paper Workers. The two last-mentioned unions are also active in the provinces, but there their respective spheres are not so clearly defined. This is largely due to the fact that the distinctions between the different departments are not so rigidly observed as in London. In the provinces, for instance, the workers on the publishing side are organised by "Natsopa,"¹ while the paper workers' union includes, in addition to paper makers and bookbinders, a number of machine feeders. In the provinces, again, both the compositors and the machine minders are covered by the Typographical Association. Members of this union, as of the London Society of Compositors, must serve an apprenticeship. Apprenticeship is also the means of entry to the National Society of Electrotypers and Stereotypers, a very strong union, which caters for the foundry workers.

Amongst other unions in the industry are the Society of Lithographic Artists, Designers, Engravers and Process Workers, and the National Union of Journalists, both of which are sufficiently described by their names. When necessary, as in the agreements following the General Strike, these unions and the others concerned in the trade have acted together through the Printing and Kindred Trades Federation.

The conditions which govern the printing industry are largely determined by the agreements which have been made between the employers' associations and the unions. These agreements are often very detailed, and are designed to cover all aspects of the work. Inevitably, disputes and questions of interpretation must arise, and machinery is provided for their peaceful settlement. In London, the Newspaper Proprietors' Association has, in all its agreements, a clause providing that such questions shall be referred to a general committee of three from each side,

¹ National Society of Operative Printers and Assistants.

which has power to give a binding decision. Similar joint committees for the rest of the trade deal with ordinary labour matters, and the Joint Industrial Council provides a further means for securing a peaceful agreement. The Joint Industrial Council has the power only of giving advice, and of providing an additional channel through which the two parties can come together for amicable discussion, but, until the Joint Industrial Council has failed to bring about the settlement of a dispute, neither a strike nor a lock-out can be proclaimed.

While there are many working conditions which are common to the whole of the industry, the position of the London newspaper trade is in some respects exceptional. The requirements of a great newspaper are very different from those which govern the conduct of a general printing establishment, and the provincial Press, in the words of one of its editors, regards London as "a law to itself as far as the newspaper trade is concerned." It is, therefore, necessary, when considering the evidence advanced by the employers, to appreciate clearly to which section of the industry any particular point refers. In the following pages "The Employers' Point of View" has been divided under these headings, and in each case the evidence from the London newspaper trade is given first, followed by that of the provincial newspaper employers and of the general printers. As far as possible the section of the industry from which each example and expression of opinion is drawn is indicated, and it is hoped that this method will reveal sufficiently clearly the differences, while at the same time recognising the fundamental unity, of the printing trade. A problem may relate immediately only to one part of the industry, but its indirect effects are often felt throughout. In particular, the policy of the London newspaper proprietors is influenced by special considerations, but the effects of that policy are not confined to London. The problems of employers in other sections of the trade cannot be fully understood without reference to London conditions.

II. THE EMPLOYERS' POINT OF VIEW

A. Recruitment and Utilisation of Labour. *Recruitment.*—Three kinds of houses exist in the printing industry—union houses, open houses, and non-union houses—but

by far the greater proportion of the labour employed is drawn from the trade unions. The attitude of the unions to the open houses is that, while they will rarely allow their members to work in the same department as non-union workers, they do not seriously object if another department in the same office is organised on non-union lines. Conditions vary according to the strength of the unions in particular shops.

All the skilled workers in the industry are recruited by means of apprenticeship. According to the figures given in the Ministry of Labour inquiry, 1925-26, out of a total of 109,255 male workpeople employed by 2,720 employers, 10,209 were apprentices.

When it is remembered that the importance of these skilled men to the industry is much greater, man per man, than that of the semi-skilled workers, it follows that the proper functioning of the apprenticeship system must command the urgent attention of the employers.

The London newspapers take little part in the training of apprentices, and, except as regards the stereotyping and process departments, they rely on the general printing trade to provide the necessary supply of skilled labour. To some extent this position is forced upon them as it is illegal to employ boys under the age of eighteen on night work, but it is also argued that the peculiar conditions of a great newspaper office are unsuitable as a training ground. One group of employers expressed a desire to train their own apprentices, pointing out that the training at present given is not always suitable. Machine hands in commercial printing houses usually learn their trade on flat bed machines of the table type. They have no experience of the very different rotary machines used in newspaper work, yet they have to be paid as skilled operators while they learn this work. In the opinion of these employers the arguments regarding night work are not relevant, since evening newspapers are printed in the daytime, and they hold that the real object of the unions in objecting to apprentices in newspaper offices is to be found in their desire to control the supply of essential labour. This view, however, is not representative of the general opinion of the London newspaper proprietors.

In provincial newspaper offices apprentices are trained in the composing department, the foundry, the process

room and the editorial department. Weekly newspapers, which are also in most cases general printing offices, have apprentices in all departments including the machine room, but it is very unusual to have apprentices in daily newspaper machine rooms. Of recent years employers and trade unions have been co-operating in the administration of the apprenticeship system, and the general printers in particular state that this has resulted in the introduction of a better type of recruit.

In the national agreements relating to apprenticeship limitations are placed on the number of boys entering any section of the trade. In the stereotyping department, the agreement for newspapers, excluding London, is on the basis of two apprentices to eight or fewer men, regularly employed, and one apprentice to every four men above that number, with a maximum limit of six apprentices in any one firm. Under the agreement with the Typographical Association, the ratio is fixed according to the following scale :

TYPOGRAPHICAL ASSOCIATION

Apprentices

1 apprentice allowed to 1 journeyman			
2 apprentices	„	„	from 3 to 7 journeymen
3 apprentices	„	„	„ 8 to 17 journeymen
4 apprentices	„	„	„ 18 to 39 journeymen
5 apprentices	„	„	„ 40 to 59 journeymen
6 apprentices	„	„	„ 60 to 79 journeymen
7 apprentices	„	„	„ 80 to 99 journeymen
8 apprentices	„	„	„ 100 journeymen

Provincial newspaper employers contend that the ratios are too low to allow of the maintenance of a proper supply of skilled labour. They point out that their view is supported by figures obtained by the Ministry of Labour during an inquiry undertaken in 1925-26. These show that, in order to maintain the existing number of journeymen, apprentices are needed at the ratio of 1 to 4·0 compositors, 1 to 4·75 stereotypers, and 1 to 4·5 letterpress machine minders. In 1925-26 the shortage was particularly noticeable with regard to stereotypers, and though the position has since eased somewhat it is not regarded as satisfactory.

The view of the provincial newspaper employers is that "the present numerical system of restricting the number of apprentices means that too many are trained in offices which cannot or do not give them a fully adequate training, and too few in big and well-equipped establishments which would not only give them an all-round training but could also absorb them when they became journeymen." It follows that the small paper, which does not wish to turn men adrift at twenty-one, may not train its full quota of apprentices in all departments, while the big shop is prevented from training as many as it wishes. The unions point to the number of unemployed as a justification for keeping the numbers low, but some of these are men who are not fully trained just because the system of limitation operates to prevent them from being trained in the establishments best fitted for that purpose.

In illustration of the effects of the rules, one employer producing a bi-weekly local paper complained that on busy days he was compelled to employ journeymen on work which juniors, had they been available, could easily have done, and thus his costs of production were unnecessarily increased. Another employer with a large staff said that if it were possible he would like to increase the number of apprentices in his composing room by 50 per cent.

Some newspaper employers further make the complaint that they are not allowed to employ their full quota of apprentices. Because no junior under eighteen may be employed on night work, the Typographical Association insists that the number of apprentices shall be assessed on the day staff only, and that the night and day staffs shall not be grouped together for this purpose. In other cases, however, it has proved possible to obtain night staff apprentices by transferring them from day when they become eighteen.

The general printers do not raise the same objections to the system of limitation. One employer stated: "The system definitely works towards keeping the supply of skilled labour short," but this view was not supported. Employers in this section of the trade appear to be well satisfied with the operation of the apprenticeship system.

With regard to mobility of labour, the employers in the printing industry have little evidence to offer. They acknowledge that the stereotypers' union in particular has

done useful work in the past in assisting the movement of labour from district to district, but the fear is expressed that recent developments may lead to difficulties. The London compositors some years ago set up a bar against members of the Typographical Association, making it impossible for the latter to obtain jobs in London. In justification of this move, it is argued that wages in London are so much higher than elsewhere that, without some such check, the London market would be swamped by applicants from the provinces.

It is not yet clear what the full effects of this policy may be, but an instance given by one employer is interesting as showing the sort of position that may arise. The employer in question is the proprietor of a newspaper printed in outer London, a division of the trade occupying an intermediate place between the capital and the provinces. A typograph operator was required, and, in accordance with past practice, an advertisement was inserted in a London daily: "Typograph operator, Society, permanency." Among the applicants was a most suitable man from a small town just outside London. He had his trade-union ticket, but the employer was informed that he could not engage him because he was not a member of the London Society. At the same time, they themselves had no one suitable to offer him.

Utilisation.—In a trade such as printing, where a high degree of skill is required for much of the work, there is naturally a great deal of specialisation and strong lines of demarcation between the different sections. Modern development has tended to emphasise the division of labour, particularly in the large London newspaper offices. In general, the more progressive employers throughout the trade are in favour of specialisation, and it is only in shops with a small staff that the difficulties are acutely felt. Nevertheless evidence was advanced by employers in all three sections directed to show that the rules might in some cases be relaxed with advantage. The instances put forward are given below, and it should be noted that the importance of the various points, and the extent to which they are supported, vary considerably.

In London the distinctions between different classes of work are strictly observed. Whatever may be the circumstances, there is one class of worker, and one only, who

has the right to undertake a particular piece of work. It is suggested that there are occasions where there might be rather more elasticity, and the following example was cited in illustration.

A little while ago a scheme was started whereby certain editions of the evening newspapers had late news for the "fudge," or blank space, printed on machines housed in mobile vans. These vans covered different London suburbs, so that the inhabitants were thus served with the very latest news. At first the machines were worked by a compositor, with the assistance of the van-driver for feeding them, but this was not allowed to go on for long. Feeding paper into the machines is the prerogative of the members of the National Society of Operative Printers and Assistants, and the union insisted that one of their men should do this work. This meant that the mobile printing vans would in future have to carry 50 per cent more staff than was necessary, and, as a result, plans for the development of this service had to be abandoned.

A more serious issue is raised by the attitude which the unions in London take up towards the work of an office as a whole. They hold that they are engaged by a particular paper; if there is a slack period during their ordinary working hours they will not help out with any other work which may be on hand. An office which runs a morning and an evening paper must have two separate staffs. This system does not apply in the provinces, where men are engaged, not on a particular newspaper, but for any work coming into the office. Some London employers feel that "one staff, one paper" constitutes a grievance, but others accept it as part of the ordinary working organisation.

Amongst provincial newspaper owners and general printers complaints regarding undue rigidity are of two kinds. In the first place it is said that there are cases where a differentiation could properly be made between skilled and unskilled work, and that the unions, in refusing to admit this, are hampering efficient development. It is said that the great increase in the use of machinery has to some extent limited the scope of the craftsman, and that there are cases where the machine has so simplified the operation that the work can now be done by a man who has not had a long apprenticeship training.

An instance in which there is considerable measure of agreement concerns the foundry, where the stereotypers' union has refused to admit that certain operations should not be included in the skilled category. "The job of putting metal into a metal-pot to melt it up, and the job of lifting plates out of the machine, are obviously bare routine. Once you have learnt the speed at which a lump of metal must be dropped in, and once you have learnt the knack of taking out the plates, it is a repetition job, depending merely on physical endurance. Yet," says an employer, "we are not allowed to have a second grade of labour to do what we regard as the unskilled parts of the job." This man, the "pot hand," has to be paid the wages of a craftsman.

In the opinion of the employers, there is room for a semi-skilled grade of labour to undertake such work as this, but the unions insist on the employment of trained men at a higher rate of wages than the work undertaken justifies.

The second class of complaints concerns the policy of the unions in insisting on watertight departments without the possibility of interchange between skilled men in different departments. For example, apprentices entering the letterpress section in the provinces receive a general training in machine and composing work, but, once the training is finished, a man must become either a compositor or a machine minder, and thereafter he cannot change to another department.

It is contended that this rigid departmentalism could be relaxed without detriment to the workers, and that time and money would thereby be saved. The following examples illustrate the difficulties which arise from these regulations :

(1) Machine minders are forbidden by rule to make any alterations in the type, however trivial. All corrections must be made by the compositors, which often involves costly delay.

(2) A typograph operator puts his work on the galley, but he may not pull a proof; a special man must be employed for that.

(3) In one shop an employer complained that if he set a boy to sweep the floor the lad would not be allowed to touch any bales of paper. That privilege is reserved

for members of the paper workers' union. This last is an extreme example, but it can be justified from the rules, and it supports the opinion of one employer who remarked : " If all the rules . . . were rigidly carried out, I doubt whether any office could carry on at all."

The examples given above are drawn from general printing, but the newspaper offices experience similar difficulties. The case of a small office producing a weekly or bi-weekly paper provides a good example. Probably one or two stereotypers and a couple of apprentices are employed. There are at most two rush periods in the week when these workers are fully employed. For the rest of the time they have very little to do, but they are not allowed to lend a hand in machine work or in the compositors' department. Formerly the stereotyping work was done by members of the Typographical Association, who were employed in their own departments during the remainder of the week. The Stereotypers' Union has set its face against any such arrangement, and is forcing these offices to employ extra men, at high wages, to do work which it is claimed the existing staff could quite well undertake.

In all these cases the argument is that the efficient utilisation of labour is restricted, and costs are raised, through the insistence on an exact definition of each man's work. The instances have been supplied by a number of employers, but for the most part they regard the restrictions as irritating and unnecessary rather than as serious handicaps.

Finally with regard to utilisation of labour some employers believe that the unions interfere unduly regarding matters of staffing. After the General Strike an agreement was reached between the employers and the workers in the industry, which contained, *inter alia*, the following clause : " There shall be no interference by the trade unions or their members with the conduct of the business, or with the right of the management to engage, employ, promote, or discharge members of the unions signing this agreement."¹ A number of employers feel that this clause should give them full power to arrange matters of staffing, but in regard to the manning of various machines many

¹ The quotation is taken from the agreement between the Federation of Master Printers and the Newspaper Society, and the Printing and Kindred Trades Federation.

of the agreements contain clauses such as : " The question of the manning of rotary machines shall be a subject for negotiation between the rotary chapel and the management." It is stated that the union often will not discuss the matter, but attempts to dictate terms, though many employers feel that matters of staffing should be the concern of the management only.

In illustration they cite in full the conditions which the National Society of Operative Printers and Assistants endeavour to impose regarding the manning of presses. The union claims that, in addition to a Typographical Association minder, each press should have a brake hand, an oiler, and a fly hand, and that learners should not work on the fly. The employers believe that the machine is overstaffed, and that the work on the fly is suitable for learners. Again, the employers contend that, owing to the demands of the stereotypers' union, junior autoplates and autoshavers are overstaffed.

B. Hours and Wages. *Hours.*—Hours and wages in the printing industry have been fixed by national agreements between the employers and the unions. The agreements governing newspaper work vary somewhat, but the general arrangement is forty-eight hours for day work and forty-five hours for night work, per week. Process workers have slightly shorter hours, as have lino operators and rotary machine minders on night work, while the stereotypers' hours of work are calculated on a fortnightly basis averaging out at forty-four and thirty-three hours per week for day and night work respectively. The agreements make provision for holidays, and notice varying from a week to a month according to the class of worker is necessary to terminate employment.

The contract in the general printing trade is for a forty-eight hours' (day) and forty-five hours' (night) week. Overtime, at special rates, is permitted up to an average of eight hours per week, and it is agreed that there shall be one week's holiday, with pay, in addition to the usual bank holidays.

The London newspaper employers make no criticisms with regard to the working hours, but in one case exception is taken to the conditions governing the payment of overtime. " If we were to call men in at 9 p.m. (our

starting time being 10 p.m.), we have got to pay double time for that hour, and if, as is probable, it is impossible to give the men a meal time at 10 o'clock, we have to pay them for an additional hour. In this way a man working from 9 p.m. to 10 p.m. may receive three hours' pay." It is suggested that the operation of the rules in such instances places an unnecessarily heavy burden on the employers.

While other London newspaper proprietors do not raise this point, there is some support from provincial newspaper owners. The general opinion in this section of the trade is that the men interpret the agreements with due regard for the exigencies of production. There is some give and take in the working of overtime, but the statement is made that the men are "very keen on overtime." Some employers believe that the time has now come when overtime rates could be revised without unfairness to the workers. Under existing agreements, overtime is charged at the rate of time and a quarter for the first two hours, time and a half for the next three hours, and double time after that. This arrangement protected the workers from exploitation at the time it was made, but to-day no employer wishes to work more overtime than he can help. It is too expensive. These employers believe that a flat rate of time and a half would now be a just compromise.

In the interpretation of the existing agreements with regard to hours, the employers consider that the unions demand a greater rigidity than is provided therein. Theoretically, the hours of work may be fixed anywhere within certain limits, but actually, once they have been fixed, it is difficult to alter them again without paying overtime rates. In one office the stereotypers' union would not agree to an arrangement whereby half the men concerned started and ended work half an hour earlier than the others, unless overtime was paid. The arrangement did not mean working any extra time, and was suggested in order that the preliminary preparation and the clearing up at the end of the day might be better organised.

A general printer, commenting on the example given above, expressed the opinion that few employers would object to a claim for overtime in the circumstances stated. In this section of the trade employers appear to be satisfied with the agreed hours of work and the conditions governing overtime.

Wages.—Rates of wages in the printing industry in London are settled by negotiations between the Newspaper Proprietors' Association and the unions. Elsewhere they have been fixed by agreements between the unions and the Federation of Master Printers and the Newspaper Society. In some cases, as in the agreement with the Typographical Association, these employers' associations have acted together; in others they have made separate agreements. But in all their negotiations they have adopted an agreed scheme under which the country is divided into six grades, with an appropriate scale of wages for each.

As the following table shows, wages in the industry have more than doubled since 1914. There has been no reduction since 1922–23, and the fall in the cost of living has, therefore, increased their “real” value. (The particulars are taken from the Inquiry into Apprenticeship and Training undertaken by the Ministry of Labour in 1925–26.)

PRINTING

LONDON

	<i>Pre-War rates of wages (shillings per week)</i>	<i>Rates in 1924 (shillings per week)</i>
Compositors	39 0	89 0
Lino operators	45 0	96 0
Mono operators	45 0	96 0
Readers	44 0	94 0
L.P. machine minders	39 0	89 0
Binders' cutters	34 0	83 6
Warehousemen and cutters	32 6	82 6
Bench hands and packers	29 0	79 0
Warehouse porters	22 0	71 0
Layers-on	24 0	73 6
Bookbinders and rulers	36 0	80 0

The rate for stereotypers is £6 10s. per week, and apprentices in their last year receive £5 per week.

The figures show that the rates of pay in the London newspaper trade are very considerably above the average for industry as a whole. There is no general evidence to show that the rates are too heavy for the London industry

to bear successfully, but one group of employers is emphatic that high labour costs are restricting the industry in the sense that they are preventing other newspapers from starting up. These employers state that in evidence submitted to the Import Duties Advisory Committee they showed that the labour cost in a London newspaper office amounts to 30 per cent of the total cost of production, including distribution costs,¹ and they believe that the unions must bear part of the blame for what they consider is, in effect, a serious restriction. The majority of the London employers, on the other hand, do not agree with this view. One of their representatives stated, "The present limit of newspapers in London is not because of anything the trade unions have done, or because of any trade-union restriction. The cost of the distribution of newspapers is so great, and the organisation so complicated, that it is almost impossible for anyone to start a new evening paper in London unless he is prepared to make up his mind to lose a million pounds before he gets any return. These conditions have been built up by the proprietors of the newspapers and not by the unions."

It is interesting to find that the provincial newspaper owners and the general printers agree with this latter view. They are concerned at the effect that the high rates in London have on the industry as a whole, both directly through the provincial offices and other activities of the London proprietors, and indirectly by providing a standard towards which workers in the rest of the country can direct their efforts. The effects are felt particularly by the provincial employer who combines the production of a newspaper with general printing, but the general opinion is that it is the fault of the proprietors and not of the unions.

Apart from this general issue, on which there is a fundamental divergence of opinion, comments are made on certain other aspects of union policy with regard to wages. Piece work in the industry is not common ; it is practically confined to the London Society of Compositors who are paid according to a very elaborate agreed scale of prices drawn up in 1920. Payment is based on the unit of 1,000 ens, and the smaller the type the higher the rate.

¹ But not the cost of insurance schemes and competitions. An individual employee put the labour cost at from 30 to 40 per cent.

Advertisements are often composed of various sizes of type, and the rule in such a case is : " The smallest type in such advertisements to be the type on which it shall be charged."¹ A further section of the agreement (No. 92) provides that " Advertisements produced from complete blocks . . . shall, on their first appearance in the paper, be charged by the companionship according to scale. . . ." Consider the effect of these two rules in practice. A business firm, such as Harrods or Selfridges, sends in a full-page advertisement. It is already set up, and the block can go direct to the foundry. There is nothing for the compositors to do, and yet they are entitled to charge at the rate of the smallest type used, as though they themselves had set up the whole page.

London employers point out that this may well appear to be a restrictive practice, but it is part and parcel of the agreements. " Rightly or wrongly, from the very beginning of newspapers being printed in London the compositors have established certain principles which in a sense are grievances, but they are not regarded as grievances by us, because we are familiar with them."

The other printing unions are opposed to any form of payment by results, though a good many both of the provincial newspaper and the general printing employers would like to establish some kind of piece work. It is admitted that it might be difficult to fix rates where jobs vary so considerably, but employers believe that the present system prevents adequate recognition being given to good work.

Some employers in the provinces express disapproval of certain extra charges which the unions have forced them to concede. One of these relates to " call money." A call is interpreted as working before or after the usual time, a break occurring between. In addition to the ordinary overtime rate, payment will have to be made for an hour which is not worked, and it is this extra payment which these employers feel is unjustified. Originally the rule was framed to prevent arbitrary and unnecessary interference with the leisure of the workers, but it is argued that such a precaution is now not needed since employers are slow to employ men outside the ordinary hours except in times of real urgency.

¹ London Scale of Prices, s. 86.

Another rule, which was also originally framed with the object of restraining the niggardly employer from running his business on the minimum of staff, concerns casual labour. Many of the agreements have clauses preventing casual labour being brought in for an hour or two, and this, it is argued, bears heavily on newspaper offices. These cannot help but have rush periods, particularly in the dispatch departments where the men who are wrapping papers are only really busy for about three hours in the day. In such cases a little temporary help would be very useful, and would obviate the necessity of employing a larger full-time staff than is really necessary. The problem is one of some difficulty, since employers have no wish to create a large class of casual labour. An agreement which has been concluded between the Newspaper Society and the National Society of Operative Printers and Assistants seems to point a way out. By this agreement half-time staffs may be employed after 1 p.m. each day, four to five hours per day, and not less than twenty-four hours per week, with payment at the rate of time and one eighth. Suitable labour is, of course, only available in large centres, but there the agreement appears to provide a satisfactory compromise.

The whole question of wages is bound up with the peculiar position of the London newspapers. The London unions have demanded exceptionally high rates of pay, and the employers have acquiesced in these demands rather than run the risk of a stoppage. Such an attitude must indirectly affect the rest of the industry, for the ramifications of London newspaper interests are not confined in watertight compartments. However exceptional conditions in one section of the industry may be, it is impossible to isolate that section completely and to ignore its contacts with the rest of the trade, for, as has been shown, there is a common system of recruitment, and considerable mobility as between newspaper work and general printing.

C. General Conditions affecting Output and Efficiency.

The great development in the use of machinery in printing processes has affected all sections of the industry, but its effects are most apparent in the great newspaper offices where speed is a dominant factor, and methods of

mass production are highly organised. When a new machine is introduced, questions of wages and staffing are settled by the employers and the unions under an agreed procedure. It is, however, suggested by some London employers that the unions are so strong that they have been able to enforce the adoption of conditions which prevent full use being made of new inventions and mechanical improvements. Progress, it is said, is retarded by the high labour costs which the unions are able to impose.

The staffing of the large presses provides an instance of improvements which, it is contended, should have results in a reduction in labour costs. In the past, these presses had to be attended to by oilers, whose duties consisted in (1) oiling bearings, (2) filling ink ducts, and (3) fixing the plates on the cylinders. Modern presses are fitted with self-oiling bearings and an automatic ink supply, but this has not led to any reduction in the number of oilers employed.

One London paper reports an extreme instance where the union would only agree to the introduction of a new machine at rates which proved prohibitive. The machine in question was a Ludlow type-casting machine, and the employer was forced to pay a 'stab hand at the rate of £400 per annum for looking after the machine, in addition to paying movable type piece rates for all work turned out.¹ This proved so expensive that the machine was sold after six months. Similar machines are worked in the provinces without any agreement for the payment of rates above the compositors' minimum.

Another example. The latest type of stereoplate-casting machine made by the Linotype Company (known as the "Automatic") is worked in America—the country of its origin—by three men. In London the National Society of Electrotypers and Stereotypers has insisted that five men are necessary, and the night rate is £6 10s. per week of thirty-three hours.

The exorbitant nature of these claims, as regards both staffing and wages, insisted upon by the London newspaper workers is, in the opinion of a section of the employers, amply proved by the following figures :

¹ See p. 280.

HIGH-SPEED ROTARY PRINTING PRESSES

Comparative staffing per two folders double-width machine producing sixteen-page issues :

<i>Night rate per week</i>			<i>London</i>		<i>Glasgow</i>		<i>Night rate per week</i>		
£	s.	d.					£	s.	d.
7	10	0	2	minders	2		5	15	0
5	7	0	2	brake hands	1		5	0	0
4	18	6	4	oilers	2		4	12	6
4	14	6	3	reel hands	2		4	7	6
4	14	6	8	fly hands	4		4	7	6
<hr/>									
<i>Total Cost</i>			£97	7	6	19		11	£52 0 0

Union : National Society of Operative Printers and Assistants.

In London, therefore, it costs nearly twice as much per week to run these two folders, and nineteen men instead of eleven are employed.

Further, it cannot be assumed that full use is made of either men or machines during all the working hours. The unions have insisted on a rule known as the "simultaneous start," which applies both to the machine and to the composing staff. Its effect is that all the men have to be brought in at the same time, irrespective of whether there is work for them to do or not. An evening paper publishes a number of editions, and the output on the later editions is much greater than for those published earlier in the day. The maximum staff which may be required has, however, to be present from the beginning, and there is the further result that probably overtime will have to be worked at the end of the day.

The examples given above were supplied by representatives of the London newspaper proprietors, but, while the facts are generally admitted, there is not the same measure of agreement concerning their interpretation. Some of the employers are not prepared to agree that the instances provide evidence of trade-union action restricting the efficiency of the industry. They hold that the numbers employed and the wages paid have been

fixed by agreements, which have proved satisfactory in operation.

The problems attendant on the increasing use of machinery do not appear to be acute in the other sections of the industry, and very little evidence has been received relating to this matter. Rates of wages are lower in the provinces than in London, while with regard to staffing employers in general seem satisfied with the existing arrangements. It is however pointed out that conditions established in London cannot fail to affect the rest of the trade. It is impossible to segregate one section of the industry completely, and there is some apprehension lest the provincial workers should endeavour to secure conditions which—whatever their effect may be on the London newspaper trade—would impose a very severe burden on the provincial Press and the master printers.

Finally, some consideration must be given to certain less tangible forms of restriction. However carefully organised an industry may be it cannot be consistently successful unless it can rely on reasonable co-operation between employers and workers. A great deal, of course, must depend on the wisdom of the individual employer and the father of the chapel, and, in general, the impression given is that the printing industry is well served by the leaders on both sides.

London newspaper owners make no complaints regarding the standard of output maintained by their workers. In those departments in a newspaper office which have to work against time there is no suggestion that the staff does not go "all out," but provincial newspaper employers state that in the composing room, where the men are not, as in London, on piece work, a larger output could be maintained without undue effort. Similar statements are made by some general printers in regard to the machine room, but others speak appreciatively of the way in which their workers co-operate to the best advantage of the firm.

Where restriction of output is alleged it is, in the nature of things, difficult to prove. Some employers consider that the refusal of the workers in certain departments to agree to reasonable methods for checking output provides presumptive evidence that a proper level of production is not being maintained. An example is afforded by the

attitude of the Typographical Association with regard to work on linotype machines. The compositor on these machines is called an "operator." He has before him a keyboard rather larger and more complicated than that of an ordinary typewriter, but operated in much the same manner. The task of the operator is to press the character and spaceboard keys in the correct order. When a line is completed, it is automatically justified, a slug is cast from it, trimmed, and ejected into the receiving galley. All these operations are automatic and continuous, and the operator is concerned solely with the keyboard and with pressing a lever to set the casting mechanism in operation. His work is, in fact, somewhat similar to that of a typist,¹ and it is difficult to imagine any ordinary office where no record is kept of the work done by the employees. Yet such is the case among linotypers. The Association will not agree to any system of indicators, or of marking of copy, or any other kind of check on the work done on these machines. The result, according to an employer, "is that in most offices, especially the bigger ones, we get an average output per man which is below what could be turned out without even working hard." Another employer, commenting on this question of insufficient output, points out that, having regard to the nature of the work, it is difficult to find any justification for the fact that linotype operators are paid more than good display compositors.

There is little other direct evidence bearing on this point, and there is no suggestion that the unions have any deliberate policy of restricting production. Employers throughout the industry pay tribute to the skill of their workmen, and to the part played by the unions in maintaining the high standard of the industry.

III. THE TRADE-UNION REPLY

The trade unions in the printing industry have shown the same helpful spirit as the employers in forwarding the purposes of this inquiry. They speak most appreciatively

¹ During the course of this inquiry, one example came to light of an office employing a girl on an Intertype machine. This girl had been a typist in the office; she was trained by the Intertype people, and now sets up all the type for a weekly paper. Moreover, her employer says that she does it more quickly and efficiently than the men that he used to employ, and the cost is, of course, not so great.

of the good spirit which characterises the industry. "We have," said one official, "the most friendly relationship with the employers' association of any industry in the country." At the same time they are not prepared to admit the validity of many of the contentions advanced by the employers; in some cases they challenge the facts, in others they submit a reasoned justification of the policy which they have adopted.

A. Recruitment and Utilisation of Labour. *Recruitment.*—The proper functioning of the apprenticeship system is a matter which the unions have very much at heart. Generally speaking, apprenticeship agreements are primarily between the employer and the boy, and the union has no official *locus standi* in the matter. Attention has been drawn, however, to the system in operation in the electrotyping and stereotyping section of the trade, which is claimed as unique, and "tremendously successful." The Electrotyping and Stereotyping Trade Employers' Federation and the National Society of Electrotypers and Stereotypers have co-operated to form a trade apprenticeship board. Every boy is apprenticed not only to an individual firm but also to this board, and receives a course of training at the London School of Printing. It is claimed that this system of apprenticeship produced "a better class of lad at the end of the fourth year than we used to get at the end of the seventh year."

While willing and anxious to co-operate in maintaining and improving the apprenticeship system, the unions are not prepared to admit that the agreed limitation of entry results in any shortage of labour (pp. 221-22). On the contrary, they argue that the ratio is too high, and that "the master printers are taking so many apprentices that to-day London is swamped by its own people." They hold that the amount of unemployment in the trade shows that a proper balance between supply and demand has not yet been achieved, and they are not prepared to admit that, in prosperous times, there is any shortage of skilled men.

The London Society of Compositors has a membership of approximately 14,000, of whom 10 per cent are at present unemployed. If it be argued that conditions to-day are exceptional, their reply is that never since the War have they had fewer than 800 unemployed men on their books.

In face of these figures it is not easy to establish a shortage of skilled men. Moreover the demand in a newspaper office for certain sections of the employees fluctuates, according to the size of the paper produced. It may be 24 pages one day, and 32 pages the next. One large union states that "we have in the London newspaper trade 8,000 of our members regularly employed, and 1,500 men casually employed." There may be, on occasion, a call for extra labour from a large number of offices at the same time, and perhaps a slight shortage, but, taking the average, there are more men on the books of the unions than the trade can absorb.

With regard to the point raised by the London newspaper owners that they are not permitted to train apprentices for certain types of work (p. 220), the union reply is that the newspapers have no real wish to train apprentices. "What they want to do is to take the cream of the men who have been trained by the master printers." One union stated that they had never been asked to allow learners in the London newspaper offices, though they had both learners and apprentices in some provincial offices by agreement with the employers. The stereotypers, one of the two trades that allow apprentices on newspapers in London, state :

"Generally we have found that until recently the employers have not availed themselves of the full number of apprentices they are entitled to in the agreement. There has never been a real shortage of labour in our trade. A few years ago, when there were a number of newspaper offices opened up in different parts of the country, we agreed that the employers should put down additional apprentices beyond the agreed number, and I should say it is absolutely untrue to say that there is any starving of the trade for labour."

The statement quoted from the Ministry of Labour's Report on p. 221 relating to the shortage of stereotypers is queried by the union. They suggest that newspaper proprietors were arguing from an abnormal period when a number of new offices had just started up. Moreover only a small proportion of the stereotypers go to the newspapers. "The bulk of our business is done with the trade employers, and they are perfectly satisfied." An official of the union

stated categorically that they had not been approached by the Ministry during the inquiry, and that they were not prepared to accept the conclusions reached therein.

In the matter of mobility, employers in London express apprehension as to the possible consequences of the bar recently set up by the London Society of Compositors (p. 228). The union reply is that the amount of unemployment among their members makes some such protection a necessity. Twenty years ago, when the printing trade generally was branching out, "we were able to absorb the man from the provinces without jeopardising the security of members in London. The situation has radically changed since then. We seem to have reached the limits of demand and output in London, and the volume of work tends to diminish rather than to increase." To-day London compositors are having to pay a minimum of 10s. per week out of their wages to provide unemployment benefit for the members of their society. "Can you expect them to let any men come in from the provinces and chuck any of their members on to their fund?"

Utilisation.—Grading of labour, and staffing problems, raise important questions. With regard to the need for a semi-skilled grade of labour, to demarcation problems, and to questions of management, the unions not only dispute the interpretation placed by the employers on certain facts, but also set out definite principles on which they rely in justification of their attitude.

With regard to the London newspaper trade the employers raise two points. The question of the number of staff on a mobile press was submitted by the unions concerned to arbitration, and the award given established the claim put forward by the National Society of Operative Printers and Assistants. In considering the staffing it should be remembered that the distributor is necessary in any case, whether the van carries a printing press or not. The use of mobile presses, it is stated, has not ceased since the award.

The scope of a man's employment is a second and more important question raised by the London employers. The principle at issue is whether a man is employed by an office to do any work which may come to hand, or whether he is employed on the staff of one particular paper only (p. 224). Some London newspaper offices produce a morning

and an evening paper, or a daily and a weekly paper; others do general printing as well as newspaper work. The unions will not allow one staff to do both kinds of work, except in special circumstances. They hold that a man is engaged on the staff of a particular paper. If the office which produces that paper also does other work then other men must be engaged. "If once we allowed one staff to work on two newspapers we would not know where this would end." Again, "If a newspaper producing firm takes on a contract for some pamphlet or other work, they are competing with the master printer, and we would not allow our men to fill in any odd moments to the prostitution of the general printing industry."

The question of pamphlet printing by the newspapers is an important one, for the unions know that, in such a case, the newspaper owner would be satisfied with little or no profit, viewing the whole matter as an advertising stunt. To allow a newspaper staff to assist in this sort of thing would be the ruin of the general trade, and the unions are determined to stand out against it. Colour-page advertising sheets, which have been appearing in some of the London papers lately, are a different matter, for they are included as part of the newspaper. If they were sold separately, the unions would not allow their men to produce them.

The "one paper, one staff" controversy has little effect in provincial newspaper offices. The stereotypers admit that their members work for the firm, and not for a particular newspaper, and the Typographical Association takes the same attitude in practice, if not in theory. There are, however, other matters relating to the utilisation of labour which are raised by employers in the provincial newspaper and general printing sections of the industry.

In the view of many provincial employers the increasing mechanisation of the industry has to some extent limited the scope of the craftsman. They believe that much of the work which used to be classed as skilled is now really only semi-skilled, and could be learnt by any intelligent person in six months. They therefore suggest that there is room for a grade of semi-skilled labour in the industry (p. 224). The unions dispute the employers' contention on two grounds. In the first place they do not agree that the growing use of machines has led to a diminution in the

amount of skill necessary. Secondly, they are opposed on principle to the whole idea of a grade of labour of the kind suggested.

It is chiefly in regard to work in the stereotyping department that the introduction of semi-skilled operatives has been advocated. The employers believe that a number of operations, such as those undertaken by the "pot hand," are unskilled, and a craftsman should not be employed on such work (p. 225). The unions reply that these operations are of little importance, as the men are interchangeable on the various positions on the machines, and it "would be a tremendous shop where one man would be exclusively employed on one of these minor jobs." It is true that stereotyping, which used to be done entirely by hand, is now largely mechanised. When the casting was done by hand it used to take about one minute to cast one plate. To-day a machine will cast four plates a minute. This is an automatic; a junior autoplate would probably average five plates in two minutes. Now, while it is true that the beating in of the flong, and the actual casting are no longer done by hand, the workman still has a lot of responsibility. In order to get good results he must be particularly careful with regard to the temperature of the metal. Moreover, there are many more differences in the make-up of plates than there used to be, with the result that the preparatory work on the cut pages is a very skilled job. The unions contend that the improvement in machinery and the speeding up have brought more responsibility to the journeyman. "News-paper stereotyping work is more skilled than ever before because of the speed and the difference in the make-up of the plates."

Up till 1919 there was a second grade of labour employed in the electrotyping and stereotyping departments. For instance, on an electrotyping set there were assistants whose job was to clean the batteries. As the trade developed, dynamos were introduced, and agitated instead of still solutions. The work became more skilled as the degree of accuracy of temperature and cleanliness of metal grew ever more important, and in 1919 the employers agreed to regard it as craftsman's work. The unions state that the trade employers' federation has never suggested the desirability of reintroducing a semi-skilled grade of labour.

Apart, however, from the question as to whether the work is fully skilled or not, the unions consider that an important principle is involved. "Our point is that where machinery comes in to deprive a skilled man of his job he should have an opportunity of working that machine." The employers put in up-to-date machinery for their own advantage in order to speed up production. In so doing they take work from men who have spent years in training to qualify for that particular job. The unions see no reason why unskilled men should be brought in to learn to use these machines when there are skilled stereotypers whom the machines have thrown out of work. Nor do they think it unreasonable that the craftsman operating a machine should continue to be paid a skilled wage, since, by the new methods, the employer is getting four times the old production out of each man.

Demarcation, and the whole question of interchangeability of labour, are matters on which the unions hold strong views. They do not agree that the rigid departmentalism of which the employers complain (pp. 225-26) is either unnecessary or detrimental to the best interests of the industry. While transfer from machine to case may sometimes take place, the unions feel that it is not advisable, since few men are really skilled in both processes. The suggestion that stereotypers should lend a hand in machine work (p. 226) they regard as completely impractical. The trades are as different as, for instance, those of bricklayer and joiner. "If the employers like to give the men three separate periods of seven years' training then they could interchange." As it is, stereotyping is a separate trade involving a considerable knowledge of metals.

With regard to the particular instances cited on p. 225 as illustrations of unnecessary demarcation lines the unions make the following answer: "It is said that machine minders may not make an alteration in type. In the great majority of cases a machine minder would not know how to make an alteration. . . . However small an alteration may be, the forme has got to be unlocked, and a whole mass of standing type is liable to fall all over the place. The slightest mistake would upset the whole forme, and not just the one or two words that have to be altered. . . . Our rule avoids the risk of a much more costly delay."

In the matter of pulling proofs the National Society of Operative Printers and Assistants deny the statement that a typograph operator may not pull a proof. A special man to pull proofs is only employed in very large shops, otherwise it is the compositor's job. And finally in regard to the office boy who might not sweep up paper—the reply is that the only paper the boys are forbidden to touch would be a stack which had to be handled with care to prevent bending. Naturally he would call someone more competent than himself to shift the bale.

To sum up on this matter. The unions believe that composing, machine minding, and stereotyping are three separate trades requiring different qualifications. They are not suited for interchange, and the lines of demarcation that exist are necessary, and carefully thought out. In many cases demarcation limits operate to protect the interests of the employer in preventing unqualified persons from undertaking jobs where failure or error might have serious consequences.

Demarcation barriers must limit the freedom of the management with regard to staffing, but some employers complain of further obstruction contrary to the terms of the agreement following the General Strike (p. 226). There are two chief points at issue—the staff required to man various machines, and the scope of the employment in which the worker is engaged. Manning of machines is considered in greater detail under a later heading.¹ On the general point of the interpretation to be put upon the clause in the strike agreement the unions state that it represents the attitude that they have always adopted. "The employers have always been free to employ whom they liked. We have only interfered if they victimised and penalised people." It has been agreed that manning of machines shall be the subject of negotiation, and "adequate machinery exists to adjust amicably all differences of opinion." If the employers have these complaints to make against the National Society of Operative Printers and Assistants which are indicated on p. 227, why have they not brought them before the Conciliation Committee of the Joint Industrial Council? The unions have never had these matters brought to their attention; if that had been done they would have pointed out that youths go on the fly

¹ See pp. 246-48.

at twenty years of age, and further, that newspaper machinery is very dangerous and unsuitable for unskilled juniors.

B. Hours and Wages. In their reply under this general head, the unions have concentrated on the question of wages. They are concerned first to justify the high level of wages in the London newspaper trade, and secondly to meet the arguments of the employers with regard to call money and casual labour.

On the general question of high wages (p. 229) the unions agree that the London newspaper employers have not sought to reduce wages. They do not believe that any reduction could be justified while large sums are being paid out every week in prizes, in addition to the high dividends carried by bonus shares. But the principle on which the unions rely in justification of their attitude goes further than this. "A newspaper as an article of production is not governed by costs of production in its success or failure. A good editor with a good circulation to his paper gets advertisements in proportion to his success, and the question of wage costs is a small matter. When the editor and advertisement manager are not successful, they begin to try to economise on the wage list. . . . This applies to all periodicals that depend on circulation and advertisement for their success."

Two subsidiary matters relating to wages which, in the opinion of the employers, operate to raise costs unnecessarily are the payment of "call money" (p. 231), and rates for casual labour (pp. 232). The unions regard call money as the natural consequence of bringing a man back to work unexpectedly, before he has had his proper break. The man is recalled to suit the convenience of the employer, any private plans he may have made for his hours of leisure have to be set aside, and it is only just that he should receive some compensation over and above the ordinary overtime rate to which the extra work in itself entitles him.

The unions state that it is a recognised principle in every industry that casual labour should be paid for above the established rates, and they believe that this is particularly necessary with regard to newspaper work. "If it were not so there would be very few regular men employed on the

newspapers ; they would nearly all be casuals.” There is an agreement with those London offices producing evening papers permitting the engagement of a special staff during the rush period in the afternoon. In London this is possible because the amount of casual labour required is large, and a man on a half day can often get an odd night to make his wages up. In smaller towns there are no such opportunities for picking up an extra night’s work, and the rates for casual labour must therefore be adjusted with this in mind. If the employers in the smaller towns were allowed to engage men for a few hours at lower rates than at present, it would create a class of casual labour employed only for two or three half days during the week, and this is a development which the unions are determined to prevent.

Piece work in the industry is confined to the London Society of Compositors (p. 230).¹ This union believes in the principle of piece work, whereas the others do not. It is a matter on which there is also division of opinion among the employers, and it is not a burning question in this industry as in some others. The unions state that they do not believe that employers as a whole desire piece rates.

Some London employers do, however, resent strongly the fact that their compositors are paid at full hand-rates for advertisements produced from complete blocks ready prepared (p. 231). The unions regard this arrangement as perfectly just. “This was an old bargain made by the newspaper owners and the workers. The newspaper owners bargained with the compositors that they were going to have so many pages set up in the newspapers, and they would pay for these pages whatever they contained.” The unions could not be blamed for the fact that certain advertising managers stepped into the business and sent out a stereotyped block ready to go on to the printing machine. If the rule were relaxed the unions believe that a lot of type would be set up, and matrix cases prepared, in small shops outside London. The work would be done at cut rates of wages, and the matter sent up ready to go on to the machine. As it is, some London newspaper offices which print provincial editions send out matrix cases to, say, Manchester every day. The compositors working on the

¹ It is also recognised by the paper workers’ union in the bookbinding industry in London.

Manchester edition of the paper receive nothing for the pages which are set up in London. It is easy to see the extent to which this practice could be extended if the London compositors did not maintain their rule.

C. General Conditions affecting Output and Efficiency.

Restriction of output is not a matter on which it is easy to produce positive evidence. The employers do, however, raise the question of checks upon the output of individuals, and in particular they state that the Typographical Association will not permit of any kind of record of the work done on linotype machines (p. 236). In reply the union makes the general point that "there is an agreed method of time recording being adopted by the British Federation of Master Printers after consultation with our Federation of Trade Unions. . . . The trade unions only kick when the employers want to go outside that and have some other insidious system. The employers are fully entitled to know how long it takes to do a certain job, and they get to know under a system of their own devising accepted by the whole of the unions."

Printing is an industry in which mechanical processes have made great changes during the last twenty years. This is especially true of the London newspaper section of the industry owing to the constant demand for greater speed and a still higher rate of production. Labour, which is particularly strong in London, has intervened with regard to staffing and wages on the new machines, and, according to some employers, has imposed conditions which prevent the trade from obtaining the full benefit which should result from new inventions and improvements. They argue that the unions have insisted on safeguarding the interests of the workers to an unreasonable extent, and they support their case with examples taken from actual working conditions at present in operation (pp. 238-35).

In reply to the general argument the unions not only deny that there is over-staffing on the machines—they go further and turn defence into attack, asserting that modern presses are under-staffed. "I do not agree," remarked one official, "with the statement that more men than are necessary must be employed per machine. If it is true, the employers can go to arbitration and prove their case, for the existing staffs on the modern unit type of press were

arrived at by arbitration. . . . I can make out a case for bigger staffs, and my reasons are as follows :

- (1) Continuity of running.
- (2) The increased speed of the press.
- (8) The speeding up of the work of changing editions.
- (4) The increased number of changes, and the reduced period of non-productivity whilst changing.

These are some of the reasons why I think that the modern press is under-staffed."

These arguments apply with even greater force to the examples which the employers have cited in support of their case. They instance the introduction of automatic oilers on large presses, and contend that this improvement should have led to a reduction in the number of men employed as oilers (p. 233). In reply the unions point out that the oiler's duties were never confined to oiling. Though the ink supply is now also automatic, the oiler must see that the supply is properly regulated and running evenly. He has to take off the old plates and put on new ones for the frequent changes of editions ; he has to attend to the side-lay, assist in charging the reels, and clean the press when the paper breaks. But the essence of the unions' argument is based, not on the number of his duties, but on the increased speed at which he has to work. "Certainly automatic oiling has reduced the oiler's *manual* labour, but it has increased his *mental* labour owing to the additional speed of the machines." Since the staffing of these machines was agreed upon, the general rate of production has doubled, and on some of the newest machines trebled. The same staff could not continue to work the machines unless their work had been simplified in some way, and the unions believe that, even with the new mechanical devices, the higher speeds have placed a greater strain on the men.

With regard to rates of payment on the Ludlow type-casting machine (p. 233) the unions state that some employers find it pays to instal them despite the cost. If a newspaper owner is efficient, and he wishes to have one of these machines, then he can afford to do so, and to keep on the craftsman who is displaced, at his proper rate of wages, to run it. The unions will not assist in the introduction of any machine unless the craftsman who is affected

by its advent is given the chance of working it. Similarly on the automatic stereotype casting machines, while it is true that they may be worked by three men in America, those few offices which have installed them in England have agreed to the unions' demand for five men, and find that it pays them to run the machines with that staff.

On the matter of comparative staffing of high speed rotary presses in London and Glasgow (p. 234), the unions make a number of observations. They point out that no information is given as to the length of the run, the speed of the press or the number of plate changes during the night in each office. It is not stated whether, in either case, the reels are prepared and put into the presses in the day time. They question the figure of two brake hands in London, since "you cannot have two brake hands looking after one press," and they draw attention to the fact that only one fly hand at a time can look after the fly. The number of fly hands necessary depends on the distance between the fly and the elevators on which the papers are loaded.

To sum up, the unions believe that they have an adequate answer to the arguments advanced by the employers with regard to any particular machine. On the general question they stand by the principle that the introduction of new processes cannot be permitted at the expense of the craftsmen doing the work. Provided these men are allowed to work the machine which is displacing them, and that they are not expected to accept a reduction in wages, the unions are prepared to co-operate. But they will not allow the employers to use new mechanical devices as a means of avoiding the rates of wages which they have agreed that they can afford.

IV. SUMMARY

The printing industry has remained relatively prosperous in a period of general depression, and in considering any evidence of the working of existing arrangements between the capital and labour employed in it this fact must be kept in view. Trade is seldom so good that it might not be made better by simplification of the conditions of work upon which it depends, but it remains true that restrictions and handicaps that can be borne with some equanimity

when both capital and labour are prosperous become intolerable when trade is bad.

Further, the extent to which this prosperity is shared between the different sections of the industry has important bearings on the problem under review. The investigation has revealed a considerable divergence of opinion and policy between the London newspaper proprietors and the rest of the trade. This divergence is reflected both in the agreements which govern labour conditions, and in the view which is taken of what constitutes a "restriction" on the efficient progress of the industry. Roughly, the division follows the line which divides the more prosperous of the employers from their fellows. It will, therefore, be convenient in these conclusions to consider separately the evidence drawn from London, and to deal first with the other two sections of the trade.

The attitude of the provincial newspaper owners and that of the general printers have much in common. Speaking generally, they both appear to be fairly well satisfied with existing conditions, and they do not suggest that they are seriously hampered by trade-union restrictions. Complaints are made that some conditions are onerous, and improvements are suggested. With regard to the effects of the rules limiting the admission of apprentices the employers make out a good case. The unions' arguments from the number of unemployed are not conclusive, and there is much to be said for a re-arrangement of the ratios which would permit the larger offices, with their better facilities, to train a greater proportion of the recruits.

On the need for a semi-skilled grade of labour the employers are not so convincing, and the point is not so strongly pressed. Many employers admit that the unions have good grounds for insisting on the skilled nature of most operations in the industry. A long and careful training is necessary for efficiency in the three main departments, the composing room, the machine room and the foundry. Despite the increased use of machinery, printing still depends largely on the skill of the craftsman. This is recognised by both employers and unions, and, while there may be a number of instances where a semi-skilled man could be employed, the maintenance of the high standards of the craft appears to be of primary importance.

Other instances of alleged restrictions are raised by individual employers, but these are either matters on which there is not a substantial measure of agreement, or issues—such as questions connected with the manning of machines—which can be more conveniently treated in relation to conditions in London. Indeed, in the opinion of many master printers and provincial newspaper owners, the standards which have been established in London are of great importance to the rest of the trade, for they give recognition to practices which provincial employers consider definitely restrictive. The effects are not confined to London ; they react upon the other sections of the industry, and impose a real and growing burden on those printing employers who have to carry on their business under conditions very different from those of a great newspaper office.

Judged by the standards of employers in many other industries, there can be no doubt that the London newspaper trade suffers from restrictions which have the approval of the trade unions. Wages are very much above the general level in industry ; the distribution of labour is restricted by rigid lines of demarcation, and is further curtailed through the operation of the “one paper, one staff” principle ; machine work is, in at least one important case, still paid for as if it were done by hand. A good deal of evidence has been put forward to show that there is a considerable measure of overstaffing, and any variation from the accustomed routine is difficult and costly.

The facts on which these statements are based are generally admitted, but there is not the same unanimity with regard to the implications to be drawn from them. Two questions arise. Do they, in fact, constitute restrictions on the efficiency of the industry ? If so, can the responsibility be attributed to the trade unions ?

At the back of many of the arguments advanced by the unions is the conviction that the London newspapers have shown that they can be run at a profit with the existing working conditions. If this is the case they argue that there can be no justification for asking the workers to make sacrifices in the interests of the industry. Labour costs, they state, are a comparatively small proportion of the total costs of production, and the rates of pay and

rules of work which have been established by agreement cannot be held to restrict the efficiency of the industry.

This point of view is supported by the majority of the employers. A minority argues that the high labour costs have definitely impeded the development of the industry, causing some newspapers to close down and preventing new ventures from starting, but their fellow employers deny the truth of this assertion. The latter take the view that a reduction in labour costs would have little effect on the total charges they have to meet. They are satisfied with existing working conditions, for which they, equally with the unions, are responsible.

It is evident, therefore, that if the London newspaper trade does suffer from restrictions, the responsibility lies as much with the employers as with the unions. But the evidence cannot be held to establish that the conditions of which some employers complain do constitute restrictions in so far as this section of the industry is concerned. These conditions are the result of long experience and considered negotiation. In order to justify any drastic change in the relations between employer and employed it is necessary to show that substantial benefit would accrue to the industry. Figures of newspaper circulation show that, as the reading public grows, there is a steadily increasing demand which is at present adequately met by the existing organisation. No evidence has been produced to prove that there is any large market accessible and untapped which could be reached suddenly if labour conditions were reformed. It is possible that a reduction of 50 per cent—anything smaller would be impracticable—in the selling price of newspapers might mean a large increase in circulation, but that argument has not been advanced by any employer. Even if this were so, the evidence so far available does not prove that such a reduction in selling price would result from the reforms which some employers advocate.

The present position is that the reading public gets the newspaper it wants at a price that it accepts, produced under conditions which provide large profits for some employers, and high wages for the workers. If the matter ended there there would be little cause for complaint. The serious aspect of the situation is to be found in the extent to which the policy of employers and workers in

London has reactions which impose restrictions both on the rest of the printing trade and on industry in general.

Employers in the other sections of the printing industry are clear that they are handicapped, since there is always a tendency for their working conditions to approximate towards London standards. Comparisons are made which are not really fair, since the considerations which guide the policy of a large London newspaper proprietor are exceptional. He has a special problem to consider, arising from the nature of the commodity in which he deals. He runs great risks from possible derangements in all stages of production and marketing, and he therefore feels that the dominant necessity of avoiding any stoppage or delay in production justifies large concessions to the unions.

These arguments do not apply to the general printing trade, and only in a lesser degree to the provincial Press. In both cases labour costs are much higher, in relation to the total cost of production, than they are in a London newspaper office. They cannot rely to the same extent on revenue from advertisements and other sources, and therefore concessions to the workers weigh much more heavily upon them. The printing industry is an organic whole with vital connections running through the different sections. One group of employers, in following a policy dictated solely by their own interests, can do grave harm to the rest of the trade.

Finally, conditions in the printing industry have effects on the whole industrial organisation. The high wages and profits of the London newspaper trade are in part provided out of the running costs of other industries. The extensive use of advertisements has become an essential part of the sales policy of most industrial concerns, and the high rates for Press advertisements form a heavy item in production costs. Any reforms which resulted in a reduction in these rates would undoubtedly help many trades which, unlike the printing industry, are faced with the necessity either of winning back lost markets or of opening up fresh avenues of demand.

THE RAILWAY INDUSTRY

I. INTRODUCTION

THE RAILWAYS occupy a somewhat anomalous position among the industries of Great Britain. The four great companies into which the various interests were amalgamated after the War enjoy, with the full recognition and approval of the State, a monopoly in one form of transport. Until recently this form of transport appeared to be the only means of carrying either passengers or goods in bulk overland, but now the tremendous development of road transport of all kinds has materially altered the position. The railways are faced with real competition, and they have found that the conditions in accordance with which their earlier monopoly was recognised do not now always operate to their advantage.

During the War the Government took control of the railways, and private enterprise was not permitted to reassume responsibility for this essential service until it had been reorganised and reformed. Accordingly, representatives of the Government, the employers, and the employees drew up a series of agreements and recommendations which received the approval of Parliament in the Railways Act of 1921.

This Act—which has been called the “Charter of the British Railways”—“(1) reorganised the railway system, (2) dealt with the regulation of railways, (3) designed the principles upon which railway charges were to be based, (4) included important conditions concerning wages and the conditions of railway service, (5) touched on light railways, (6) added certain general provisions.”

In providing for the amalgamation of the various railway companies under a group system, Parliament effectively reversed the policy of the last seventy years. It is true that a measure of direct competition between the amalgamated companies still remained, but this was comparatively unimportant. The whole trend of the Act was to limit

wasteful competition, and to promote the efficiency of the railway service by treating it as an organic unity.

Realising the vital importance of the railway service to the community, the Act also provided machinery for the settlement of disputes in the industry. In addition to sectional and group railway councils, following the recommendations of the Whitley Report, a Central Wages Board was established to which "all questions relating to rates of pay, hours of duty, and other conditions of service" of specified grades of employees should be referred. The board was to consist of equal numbers of representatives of the companies and of the unions, and provision was made for appeal, if necessary, to a National Wages Board. On the latter the Act gave representation to the users of the railways, as well as to the employers and the workers. Twelve months' notice on either side is necessary to vary or terminate these arrangements.

The railway industry of Great Britain is therefore partially State organised. By Act of Parliament the employers have been reduced to four large groups, acting, in relation to labour, virtually as a single unit. Further, the State has set up machinery for the conduct on a national scale of negotiations concerning working conditions. No other industry has been subjected to external regulation to this extent, and the results are of importance in relation to this inquiry.

The railway employers in this country now consist of the London, Midland and Scottish, the London and North-Eastern, the Great Western, and the Southern Railway Companies. Between them they own practically the whole railway system, with the exception of the London Metropolitan Railway, the Metropolitan District Railway and the "Tubes." One official on each of the four railways is responsible for the organisation of labour, and in their dealings with their employees the four groups act together.

The employees in the industry consist of two classes; the railwaymen proper, and the railway shopmen. The former include the clerical staff, the conciliation staff, and the permanent workers concerned with docks, dredging, small passenger steamers, canals, etc. In an agreement of April 11th, 1919, the conciliation grades were defined as (a) the locomotive and mechanical engineering staff, (b) the traffic

staff, (c) the goods staff, (d) the ways and works staff, (e) a portion of the railway-owned canal staff.

In March 1933 the total staff employed by the railway companies in Great Britain, including the Railway Clearing House, was 566,300.¹ Of these the railwaymen proper form the larger part, and the three unions which cover these workers are the National Union of Railwaymen, the Associated Society of Locomotive Engineers and Firemen, and the Railway Clerks' Association.

The railway shopmen, who number about 150,000,² have been described "broadly as those manual workers employed by the railway companies who are not employed immediately and directly in the working of traffic."³ They are men of many trades engaged in the various kinds of work that are necessary to maintain a great transport service, and in a number of respects their position differs from that of the railwaymen.

In 1920, negotiations were opened between the companies and the shopmen on the questions of rates of pay and working conditions. A Joint Committee, on which the National Union of Railwaymen and a number of craft unions were represented, was appointed, but it failed to reach an agreement. Thereupon, in 1922, the matter was referred to the Industrial Court. The chief point at issue concerned the payment of district rates, and, as the court observed, this "involves the question whether, so far as their manufacturing and maintenance work is concerned, the railways are to be regarded as being engaged in a large number of different industries, and whether they should observe the rates of pay pertaining to each."⁴

In their decision the court state that they "have given this question the thought and consideration its importance merits. . . . The manufacturing and maintenance work undertaken by railway companies is of such great extent and so closely connected with the main business of transport that it cannot properly be regarded as something merely

¹ Official figures published by the Ministry of Transport.

² The figures given by the *Ministry of Labour Gazette*, November 1934, at p. 409, for "Railway Service," are 134,020 insured persons registered as being, or last having been, in the employ of the companies, of whom 10·8 per cent are wholly or temporarily unemployed. Railwaymen proper are not included in the National Unemployment Insurance scheme.

³ Decision of the Industrial Court, No. 728, para. 8.

⁴ loc. cit., para. 15.

subordinate to it. . . . The court have, therefore, reached the conclusion that the railway service should be regarded by them as being a distinct industry to which special conditions attach."¹

The railway shopmen, therefore, are to be considered as an integral part of the industry.

A large number of the shopmen are members of the National Union of Railwaymen, while others belong to certain of the craft and labourers' unions. The wide range of trades found in railway shops may be seen from the list of parties before the Industrial Court in 1922. These included, on the shopmen's side, the Federation of Engineering and Shipbuilding Trades, the National Federation of Building Trades Operatives, and the National Federation of General Workers, representing thirty-two named unions.

Finally, some mention must be made of the wages dispute which was referred to the National Wages Board in November 1932, after the Central Wages Board had failed to agree. The National Wages Board issued its finding on January 13th, 1933, and a summary is given in the *Ministry of Labour Gazette* for February 1933, at pp. 46-47.

The companies claimed a reduction of 10 per cent, subject to certain exceptions, on the existing earnings of the conciliation grades and the salaried staff, which they estimated would result in an annual saving of £4,600,000. Approximately 420,000 employees would be affected. The claim was opposed by the unions, and the Board was not able to present a unanimous report. It became necessary for the chairman to state his views, and he found that "the grave difficulties with which the railway companies are faced at the present time justify a departure from the standards fixed by the national agreements." On the other hand, "from the rates of pay and conditions of service fixed under the national agreements, railwaymen have already made a substantial contribution towards the difficulties of the railway companies." He decided that there should be certain reductions in rates of pay, which it was estimated would produce an annual saving of about one-third of that claimed by the companies, and he stated: "The deductions which I make are temporary deductions

¹ loc. cit., para. 16.

from standard rates of pay fixed under the national agreements."¹

The companies—though, in their opinion, “the findings of the chairman fell far short of the merits of the case”—were prepared to accept these findings, but the unions were not. Subsequently, on March 3rd, 1933, the companies gave formal notice as provided in the Railway Act, 1921, section 62, terminating the reference to the Central Wages Board, or on appeal the National Wages Board, of all questions relating to rates of pay, hours of duty and other conditions of service of employees to whom Part IV of that Act applies.

II. THE EMPLOYERS' POINT OF VIEW

The case put forward by the railway employers differs from that of employers in such trades as engineering, in that they have little complaint to make concerning restrictive trade-union rules. They are not, broadly speaking, troubled by demarcation disputes or difficulties arising from the introduction of new machinery, and they do not charge the unions with encouraging restrictive practices. On the contrary, they pay tribute to the general reasonableness of the railway trade unions, and to their good faith in regard to agreements.

The criticisms made by the railway employers do, however, come within the scope of this inquiry if the phrase “restrictions which hamper industry” is given a wider interpretation. For they believe that the efficiency of the industry is hampered by the reluctance of the unions to acquiesce in relaxations of the agreed conditions of service which changed circumstances render desirable.

The existing conditions of railway service were drawn up at a time when railways were prosperous, when traffics were good and competition much less serious than now. At the time, the potential danger from competition by motor transport was not fully foreseen, nor was the possibility of a prolonged period of trade depression taken into account. Further, under Government pressure, an endeavour was made to cover, for the first time and at a

¹ National Wages Board, Decision No. 164, para. 14. See *Ministry of Labour Gazette*, February 1933, at p. 47.

single attempt, the whole of the very wide and complex field of railway organisation in circumstances which, according to the employers, did not admit of due consideration being given to the difficulties of the subject.

The agreements were drawn up by a number of committees working at high pressure, many of whose members had little experience in drafting, and the agreements themselves were in many cases the first of their kind.

From another angle it may be said that the settlements were made at a time when employers were prosperous, and wages at the highest ever known in this country. Since then economic adversity has forced on many industries reductions of wages and the withdrawal of specially costly conditions. The railway industry has suffered along with the productive industries, but the employers contend that they have not been able to effect comparable reductions.

Having regard to these considerations, the railway employers are of the opinion that the national agreements should be revised in the light of experience and of existing conditions. They consider that the unions, in refusing to agree to such revision, are doing serious injury to the industry.

A. Recruitment and Utilisation of Labour. *Recruitment.*

—A considerable proportion of railway labour is recruited from the sons of employees. In the shops a man must have served an apprenticeship in order to become a member of one of the organised crafts. The railways make provision for the training of apprentices, who are practically all sons of railway workers and who are trained free. The employers regard all conditions of apprenticeship as the concern only of themselves, the boy, and his parent or guardian, and the unions have never made any difficulty in regard to this. The system has worked well, and the railways have not suffered from any shortage either of apprentices or of craftsmen.

Semi-skilled labour in the shops is recruited by a scheme of up-grading from amongst the ordinary labourers. By this means a man who has not served an apprenticeship may "progress to status and pay little inferior to that of a craftsman."

Railwaymen are moved from place to place as part of

normal procedure. The employers facilitate such removals with the full approval and assistance of the unions. There is not so much movement among the railway shopmen, as they generally prefer to find other employment in their craft in the same district, rather than to move to a different part of the railway. There are no trade-union rules which restrict mobility.

Utilisation.—The railways have very little demarcation trouble. The establishment of the National Railway Shopmen's Council has done much to lessen inter-union jealousy, and such restriction as does arise in the shops is due to personal qualifications and not to trade-union interference.

Among the railwaymen proper there is some check on the proper utilisation of labour in the rigid system of promotion by seniority in the case of firemen and drivers. In other grades also there is a recognised ladder of promotion, but this allows some flexibility and freedom of choice. The employers reserve the right to alter the normal course of promotion if they think it desirable, and, though there are occasional complaints when a senior man is passed over, the unions do not attempt to restrict the freedom of the management in this respect.

The case of firemen and drivers provides an example of the ways in which, in the opinion of the companies, existing agreements could be revised to improve the efficiency of the industry. In August 1919 the companies, the National Union of Railwaymen, and the Associated Society of Locomotive Engineers and Firemen agreed that promotion from cleaner to fireman, and from fireman to engine driver, should be by seniority. Apart from the general argument that such a system takes no account of individual merit or skill, it has, in the opinion of the employers, certain definite disadvantages.

By the agreement a man is qualified for promotion, when his turn comes, if he has worked a certain number of turns or shifts. For instance :

“ A cleaner after working 313 turns or shifts as a fireman to be considered as entering upon his second year as a fireman when firing. . . . ”

A “ turn ” is defined as “ an occasion of driving or firing duty as the case may be.” There is no stipulation as to

length, and a turn of ten minutes' duty is as valuable for purposes of qualification as a turn of several hours. The employers regard this as unsatisfactory.

A further clause in the agreement runs :

"For temporary firing duties the senior available cleaner shall be taken."

Later, with regard to extra work, this clause was amplified.

"It was agreed that, in order to keep the seniority on a proper basis, instructions should be given to all railway companies that the senior fireman is to be used for driving duties when required, and the senior cleaner for firing duty, otherwise complications may arise through the junior men getting more turns of driving and firing duty respectively than the senior men."

Clearly the interpretation of the first clause turns on the word "available," and the later amplification tends to restrict the meaning. The companies find that the provision is sometimes awkward to work, for the senior cleaner or fireman may not be immediately available. Another man, equally efficient, may be on the spot, but, if he is used, it may lead to dispute. On the other hand, to wait for the senior man may result in the loss of time and money.

The system of seniority is cumbersome to work ; it is a prolific source of minor disputes, it is far too rigid, and it does nothing to encourage the man of real skill and merit.

B. Hours and Wages. There are no restrictions, either in the shops or on the railways, with regard to overtime and night-shift work. The companies cut both down as much as possible on account of expense, but both they and the unions realise that the exigencies of the service may at times demand long hours of overtime and night work.

The companies complain that the guaranteed day hampers them severely. This point is one of some complexity, and is therefore treated in detail under a separate heading.¹

Rates of wages in the industry were fixed, as regards the railwaymen by agreement in 1919 and 1920, and as regards the shopmen by decision of the Industrial Court in 1922. Apart from the automatic cost of living sliding scale, no provision was made for the variation of the wages of the

¹ See p. 261.

railway staff except through the "machinery of negotiation," which the employers have not found entirely satisfactory. With regard to the shopmen the machinery contemplates both parties referring any such matter by consent to the Industrial Court, but actually the only important variation—a reduction in the War wage—was achieved by agreement.

In the main shops in the industry some 80 per cent of the staff are now employed on systems of payment by results. Wherever piece work is applicable the companies have had no real difficulty in introducing it. The railway unions are "officially" hostile to bonus systems, but in practice there is very little opposition. The scope for such systems, however, is rather limited.

C. General Conditions affecting Output and Efficiency.

The companies regard all matters connected with the manning of machines, the number of men to be employed on a given piece of work, etc., "as definitely matters of management within their discretion, and no interference would be permitted." Resistance is occasionally met with in these matters, but in general the unions do not try to interfere in this direction.

With regard to the introduction of new machinery and new processes—which is such a fruitful cause of trouble in some industries—the employers state that the trade-union leaders do not stand in the way of progress as far as the railways are concerned.

Restriction of output undoubtedly takes place on occasion on the railways, but the employers feel that this is due rather to individual caprice than to trade-union policy. The unions do not encourage such practices. One cause which may lead to restriction of output is the continuance of certain unduly high piece rates, for the workers know that the more noticeable the profit balance the more likely the employer is to make some alteration. This can be obviated by a scientific system for determining the basis of piece rates.

D. The Guaranteed Day. In April 1919 the companies, the National Union of Railwaymen, and the Associated Society of Locomotive Engineers and Firemen, reached the following agreements with regard to the guaranteed day :

- (a) *Guaranteed day to all staff embraced in the conciliation grades, except those covered by Agreement (b).*

In the event of a man being available for duty on any week-day he shall be guaranteed a day's pay, subject to :

(1) When the standard week's work is comprised of six turns of duty of equal length, the man shall be paid one-sixth of the standard week's wage for each turn of duty.

(2) Arrangements may be made to work certain grades a week of forty-eight hours in five long and one short turn. In these cases wages shall be paid for the number of hours for each turn of duty as rostered. Overtime to be paid in all cases where a man exceeds on any one day his rostered turn of duty.

- (b) *Guaranteed day to drivers, firemen, motormen, goods and passenger guards, and conductors and gatemen on electric trains.*

No man to be paid less than a standard day's pay for each time of signing on duty, except as stated below :

(1) Men working a short day for their own convenience, or through illness.

(2) Men coming late on duty, through their own fault, to receive payment for the actual hours worked.

(3) Electric trainmen.—On the London Underground Railways split turns of duty are to be continued (under special conditions, as set forth).

In addition, the first agreement contained provisions relating to Sunday duty and emergency calls. The second agreement, establishing a right to a full day's pay at standard rates for each time of signing on duty, applies to week-days and Sundays alike.¹

The companies contend that the arrangement is too rigid, and economically quite incompatible with railway work, which is often of an intermittent character. They consider that the railway unions are hampering the industry by their insistence on the guaranteed day, quite apart from the guaranteed week.

The guaranteed week of forty-eight hours, in the opinion of the companies, adequately safeguards the workers. It

¹ The minimum for Sundays has since been modified by a decision of the National Wages Board.

is an undertaking that a man will be employed for a week at a time with a week's notice, and that, if he is asked to work more than forty-eight hours in the week, he will be paid at overtime or special rates. The employers do not wish to abolish this undertaking, though they have suggested certain modifications of it, but they argue that the guaranteed day is an unnecessary addition which prevents them from obtaining the full value for the forty-eight hours when measured in terms of output.

The restrictive effect of the guaranteed day is felt both on lines where there is little traffic and in districts which have to cater for rush periods during certain times of the day.

In the case of a country junction there may be three or four trains on each line spread over a period of twelve hours. Because of the guaranteed day it may be necessary to employ two or three men at each of the numerous signal boxes, none of whom is fully employed from an output point of view.

Again, take the case of London suburban traffic. In the morning the city workers are taken up by a driver, a fireman, and a guard. By the time that they are ready to return home, the railwayman's eight-hour turn is finished, and a fresh staff has to be employed on the evening trains. The companies contend that labour output in relation to the wage bill could be greatly improved if they were able to book off the morning's crew when they had got back to their home stations, say at ten or eleven o'clock, and then call upon them again at three or four o'clock for the evening rush. They realise that such an arrangement would have to be planned with great care, but they argue that it would only affect a portion of the men each week, while the resulting saving would be very considerable.

The companies' case, therefore, is that the existing agreements do not allow for a sufficiently flexible week, having regard to the nature of the industry. The rigid division of the forty-eight-hour week into either six turns of eight hours, or five "long" turns of $8\frac{3}{4}$ hours and one "short" Saturday turn of $4\frac{1}{4}$ hours, hampers the economic distribution of labour. In March 1931, the unions reiterated their refusal to agree to any modification of the guaranteed day, thus imposing a very substantial handicap on the industry.

E. General. Finally, the companies refer to the claim for a deduction in certain wages and salaries which they put before the National Wages Board in November and December 1932, and to the developments which have taken place since the Board issued its findings.

In the opinion of the railway employers the proportion of the gross receipts which is applied to the payment of labour in salaries and wages is too high, and is having effects which restrict the efficient development of the service. In 1931, after payments for materials and miscellaneous charges, the balance was divided between capital and labour in the proportions of 25 to 75, and the figures for 1932 were estimated at 22 and 78 respectively.¹ Moreover average wage rates on the railways show an increase of 114 per cent over the average wage rate in 1914, whereas "wage rates in industry generally are estimated by the Ministry of Labour to be from 66 per cent to 70 per cent more than before the War."²

It is not proposed to enter into details regarding the claim for a deduction, but the employers desire to point out the general arguments on which their claim was based. In the first place they consider that justice is not being done to the shareholders, and this is linked with the second point, namely, the need to strengthen railway credit. The railway companies are in grave need of capital to secure economies by increasing the productivity of labour through developments in labour-saving plant and machinery. They are in equal need of capital for railway development. "The present condition of affairs is unsatisfactory and precarious. A diet of debentures is unhealthy; yet even this resource may be barred to the companies by a further deterioration of their financial position. They must convince private investors of their future stability and earning power, if they are to secure their support. . . . Nothing would have a better effect than the knowledge that wage earners and shareholders were making common cause to face the losses incurred and that wage earners appreciated the need of meeting the situation by facing a reduction of wages costs."³

The third ground upon which the companies' case rests

¹ The Case of the Four Group Railway Companies for a Reduction in Labour Costs, s. 11.

² loc. cit., ss. 27 and 29.

³ loc. cit., s. 58.

is the high level of railway costs. While wholesale prices in general are only 2·1 per cent above pre-War, "the railway companies are only able to sell their services to the trading public of this country at a figure which is still 52½ per cent above pre-War."¹

The companies believe that present conditions call for long-range policies if the industry is to be maintained and developed as a public service should be. At present the margin of net revenue is too narrow to encourage the development of such policies with their attendant risks, but they believe that the position would be materially changed if labour costs could be reduced.

Since the presentation of their case, and the issue of the findings of the Board, the companies have given notice to the unions in pursuance of Section 62 of the Railways Act, 1921. This notice affects only the National Wages Board and the Central Wages Board, and the companies have no wish to depart from their established policy of discussing labour matters with the employees. Negotiations of a very friendly character are now in progress, and the companies believe that the traditions of co-operation will be continued and developed.

III. THE TRADE-UNION REPLY

Railway workers are proud of the way in which their organisations and those representing the employers have co-operated in the interests of the industry which they all serve. "The way in which the railway unions and railway management have worked in co-operation in recent years has been a pattern to all the other big industries in the country. We co-operated together on Unemployment Insurance. We also worked together in connection with the Salter Report. We joined with the railway companies in stating that there were anomalies in connection with the road services, which were one of the big causes of railway depression. Moreover, a great number of railway workers served on public bodies, and these men always protested against any injustice imposed on the railways in connection with local matters such as rating, etc." It is a matter of great regret and disappointment to the unions that the result of the recent wages discussions has been that the

¹ loc. cit., s. 60.

companies have given notice to terminate the conciliation-machinery agreements. They hope, however, that the friendly negotiations now in progress may find means to continue the tradition of conciliation and co-operation.¹

In their review of the relations between the workers and the management in the industry the employers have stressed only two examples of real disagreement. The two issues on which they believe that essential reform is prevented by the attitude of the unions are: promotion by seniority, and the guaranteed day. In their reply the unions have also concentrated on these questions, but they have also added certain general considerations relating to the wages dispute, and to wider issues of railway management. These arguments are summarised on pp. 268 ff.

A. The Guaranteed Day. The railway employers have advanced a number of reasons in favour of modification of the principle of the eight-hour day (pp. 261-63). The guaranteed day was agreed to in 1919, during the re-organisation of the railway services after the War. In the opinion of the employers, it has proved unduly rigid and incompatible with work which is often of an intermittent character. They feel that the interests of the workers are adequately safeguarded by the guaranteed week of forty-eight hours, and that, within the week, greater latitude could be conceded without causing hardship.

In contrast, the unions regard the guaranteed day as an essential working condition, embodying a principle of great importance. "It was one of the driving causes for the growth of trade unions in the first instance." Without such a safeguard the men are liable to be called out at any hour of the day or night; they can never make arrangements of their own with any certainty, and they may be faced at one moment with a sudden rush of work and at the next with a couple of days of enforced idleness, according to the whim of the officials in charge. Even under the present arrangement the unions contend that "there are very few railway grades where there are eight continuous hours. The majority of the other grades have meal times, and they are played off so that their eight hours' duty is spread over as many as twelve hours. The companies have got the relief that they wanted in regard to the spread-over."

¹ See *post*, p. 270.

The example given by the companies, of the unnecessary duplication of staff at a small station which is entailed by this arrangement (p. 263), is challenged by the unions. They point out that a full staff will not be employed at such a station, and that in practice the stationmaster will undertake almost all duties. The companies may complain that the guaranteed day prevents the fullest and most economical disposal of labour, but this is hardly confirmed by the fact that, in ten years during which the eight-hour day has been in operation, there has been a reduction of over 100,000 in the men employed on the railways.

B. Promotion by Seniority. Promotion by seniority (pp. 259-60), the other important point on which there is conflict of opinion, was also established in 1919. Before the War it was only in operation on one line, the old North-Eastern Railway. The employers find it cumbersome to work, causing unnecessary delays, and they consider that a system which does not allow of any recognition being given to outstanding skill and merit is open to very serious objection. They believe that the removal of this method of promotion would obviate difficulties and make for greater efficiency.

The railway unions take strong exception to these views. They "are of the opinion that this system proves to be the most efficient and less liable to abuse than any other, because, in a big industry like the railways, unless one had such safeguards, there would be favouritism, abuse, and red tape, creating an impossible situation. . . . When the railway companies had the power of discriminating between one man and another, nearly all the strikes that arose were on this question." The unions hold that "the tranquillity on the railways is largely due to promotion by seniority, which includes the passing of the necessary tests."

In order to qualify as an engine driver a man has not only to serve the necessary number of turns, he must also be examined and pronounced physically fit, and he must pass an examination regarding the machine which he is to drive. These are necessary safeguards. They protect the interests of the public, and the record of the British railways provides high testimony to the skill and efficiency of the drivers and firemen. From the men's point of view "the

system presents an incentive to qualify, because they know that, if they are successful, no favouritism can prevent them from getting promotion when their time comes." In the opinion of the unions, any interference with the agreed method of promotion for this class of worker would be disastrous, in that it would destroy that feeling of security on which, more than on anything else, peaceful relations within the industry depend.

C. General. The companies, in their review of the present situation, have expressed the opinion that the difficulties which hamper the industry through the effects of bad trade and road competition are to some extent aggravated by the agreements made in pursuance of the Railways Act of 1921. They believe that these agreements were settled in haste, at a time when circumstances were abnormal, and that experience has shown the necessity of revision (pp. 257-58). In this report they have taken as examples the two questions of the guaranteed day and promotion by seniority, but the unions consider that the recent application to the National Wages Board for an increased deduction from earnings is part of the same policy and inspired by the same arguments. The unions are fundamentally in disagreement with the premises on which the employers' case is based, believing that the agreements in question were "based on lifelong practical experience on both sides," and represent the fruit of years of negotiation and discussion.

The unions hold that the remedy for the difficulties which are troubling the railways is to be found, not in a further lowering of the workers' standard of life and working conditions, but in the reform of policy and management. When wages were standardised they were, in the words of the chairman of the National Wages Board, "properly related to the duties which railway servants are required to perform and the necessary skill and responsibility attaching to those duties."¹ The only justification for seeking to vary those rates, therefore, would be that all other avenues for economy and readjustment had been fully explored, and this the unions strenuously deny. They believe that, in such matters as the readjustment of capital liabilities, the reform of rating assessments, and the problem of road

¹ Quoted in the *Ministry of Labour Gazette*, February 1933, at p. 47.

transport competition, much could be done which would substantially relieve the financial situation.

With regard to the first point, the unions are of the opinion that the railways cannot be regarded as financially sound or economically managed so long as they are burdened by a heavy load of "dead" capital. In the year 1980 the net revenue of the railways was 22·06 per cent of the gross receipts; in 1931, 21·06 per cent. In the same years the Post Office also made a clear profit of about one-fifth of the gross receipts. But whereas the Post Office, in these years, paid between $3\frac{1}{2}$ and 4 per cent in interest on its total capital, and still had a surplus of from 12 to 13 per cent of its total operating income, the railways' profit was swallowed up by the debenture, guaranteed, and preferred shareholders, leaving the ordinary shareholders with practically nothing. The explanation of this difference, the unions assert, "is that in the past the railway directors did not redeem the capital in harmony with the depreciation of their assets, a policy which is adopted by all public authorities. . . . In times of cheap money they appear incapable of raising low-interest-bearing debentures and other redeemable stocks."¹

It is well known that the railways pay very heavy rates on their permanent way, and failure to get these substantially reduced has added to the advantages enjoyed by their competitors on the roads. The unions believe that the problem of road competition should have been tackled years ago, with special reference to some of the more glaring anomalies. For instance, with regard to goods vehicles on the roads—"It is," to quote the Chancellor of the Exchequer, "particularly anomalous that the taxation scale should stop at five tons unladen weight when there are many road vehicles which reach ten tons and even more." These duties are to be increased as from January 1st, 1934, but the unions agree with the Chancellor that "such an increase is long overdue," and they feel that the companies should have pressed the point much more strongly in the past. In their evidence before the Salter Conference the companies estimated, after making due allowance for bad trade, that their annual loss in net revenue resulting from road competition was £16 million,

¹ The figures and quotation in this paragraph are taken from the *Railway Review* of Friday, February 10th, 1933.

but that, if the recommendations of the report were put into operation, they hoped to recover a large proportion of this lost revenue.

The cuts in wages proposed by the companies in 1932 would result in an estimated saving of £4,600,000; the unions feel that it is unjust that their members should be asked to accept the heavy sacrifices these cuts would entail when three or four times that amount need not have been lost but for faulty management and the failure of the companies to appreciate in time the urgency of the problems of road competition.

Undoubtedly the financial position of the railways is unsatisfactory. But, if the recommendations of the Salter Report are put into effect, if the new pooling agreements are carried out efficiently, and if some real attempt is made to face up to the problem of over-capitalisation, then "there is reason to hope for some substantial improvement in the position in the near future." At such a time the goodwill both of the employees and of the public is essential, and the unions, while regretting that the companies have attacked the established machinery of conciliation, have every hope that the tradition of co-operation will be continued.

IV. SUMMARY

The representatives of the employers in the railway industry have concentrated on two points: the guaranteed day, and promotion by seniority among engine drivers and firemen. Both issues come within national agreements made in 1919, and, on both, the unions are resolute in opposing any change.

With regard to the guaranteed day, the unions point out that there is a "spread-over" agreement which may extend to ten or twelve hours, and further than this they are not prepared to go. It should be noted that the spread-over does not apply to drivers and firemen, and, while appreciating the force of the arguments against indiscriminate calls on a worker at any hour, it appears that the unions might reasonably agree to some arrangement to allow of rather more freedom in the distribution of labour within the limits of the guaranteed week.

The method of promotion is a matter on which the unions

feel strongly, and there is a good deal to be said for an automatic system, subject to proper safeguards, in an industry which is so large and so widely spread as this. Any other system could not have the advantage of being based on personal knowledge, since the general managers would be forced to rely on the reports of subordinates. It seems that the present arrangement might be improved if the definition of a "turn" were standardised. The unions argue that a cleaner or fireman cannot be promoted if he has not had adequate experience in the form of a set number of turns of duty, but the argument would be stronger if the turns were all of the same length, and did not vary from ten minutes or so to several hours.

Both employers and workers are proud of their record of amicable dealings. Since the former have been represented effectively by four general managers, negotiations between the two sides have been simplified. The men are not, comparatively, so well organised, though, except on one occasion in 1924, the unions have proved competent to speak for their members.

Throughout the investigation both employers and men have shown a very genuine regard for the interests of the industry. To comment on the present negotiations would be out of place, but, judging from the friendly and helpful spirit of which both sides have given evidence, there seems every reason to hope that the railway industry will continue to provide a valuable example of the benefits which follow from co-operation and the development of agreed methods of conciliation.

THE SHIPBUILDING INDUSTRY

I. INTRODUCTION

IN THE HISTORY of Great Britain and Northern Ireland the shipbuilding industry has played a notable part. It can trace its origin back through the centuries, yet it remains a vital factor in national economics and in the development and maintenance of the British Empire.

The importance of the industry at the present time may be judged from the Census of Production figures for the year 1930. For that year the total value of the output of the shipbuilding trade of Great Britain and Northern Ireland was not less than £80,000,000, while the trading value of the twin industry of shipping was £150,000,000. Moreover, this record has a greater significance in relation to industry as a whole than the bare figures reveal. Shipbuilding is the greatest assembling and constructional industry in the country, so that "for every man employed in the shipyard on a particular contract two other men are employed in the other industries dependent upon it."¹ In normal times the cargo vessel is the chief product of the industry, but British yards have a high reputation for the construction of many different types of ships, and they are accustomed to build to the varying requirements of foreign customers. In the latest census year (1930) 44 per cent of the total output of merchant tonnage was for foreign owners.

On the employers' side the industry is very well organised. There are a number of district associations which are federated to the Shipbuilding Employers' Federation. The shipyard trade unions are also strongly organised, though the great variety of workers for whom they have to cater prevents the same degree of homogeneity as characterises the Employers' Federation. Amongst the workers, the comparable national organisation is the Federation of Engineering and Shipbuilding Trades, which

¹ G. Tristram Edwards, in the *Glasgow Herald Trade Review*, December 29th, 1933.

includes the large majority of the unions connected with the industry. A few organisations, amongst which are the Amalgamated Society of Woodworkers, the United Society of Boilermakers and Iron and Steel Shipbuilders, and the Amalgamated Engineering Union, do not belong to the Federation of Engineering and Shipbuilding Trades, though, in general, they act in close co-operation with that body.

The industry has an excellent record of friendly co-operation between the employers and the unions. In 1926 a procedure agreement was concluded by the Employers' Federation and the Federation of Engineering and Shipbuilding Trades, setting up machinery for the settlement of any question other than general fluctuations of wages.¹ The terms provide for the reference of questions in dispute first to yard meetings between the parties directly concerned. If agreement is not reached, the matter can then be referred to a local conference between the local Employers' Association and local representatives of the union or unions concerned. If that does not result in a settlement, the question can then be taken out of its local atmosphere by being referred to a central conference consisting of representatives of the Employers' Federation and of the executive council of the union or unions directly concerned. If the central conference fails to agree, the question may, by mutual consent, be referred to arbitration, or either party may refer it for final settlement to a general conference between the Federation and all the unions party to the agreement. General conferences are presided over and conducted by an independent chairman, who, however, has no vote. The position of independent chairman was occupied at first by Lord Macmillan, who was succeeded, on his appointment as a Lord of Appeal, by the present holder of the position, Mr. T. Graham Robertson, K.C.

The Boilermakers' Society and the Amalgamated Engineering Union have not officially accepted the procedure, but they recognise its principal provisions in dealing with questions affecting their members. In practice, the agreement has proved very satisfactory; the procedure makes provision for the prompt discussion and settlement of both local and national questions, and, until it has been exhausted, no stoppage or interruption of work can take place.

¹ The agreement includes a special procedure for piece-work questions (Clauses 15-22).

The economic depression of the last three years has had very serious consequences for the shipbuilding industry. "It always has been a highly competitive industry, both within itself and internationally, producing a product which has to be used internationally and which we recognise must therefore be produced on strictly competitive lines."¹ Naturally, therefore, it felt the full effects of the dislocation in world trade, and 1932 was the worst year in the history of the trade. The figures for 1934 show some slight improvement, and, though 47·5 per cent of the insured persons registered as being, or last having been, in the employ of firms in the industry were still wholly or temporarily unemployed in October of that year,² there is definite evidence for believing that 1935 will mark a further stage on the road to recovery.

Apart, however, from the effects of the acute world depression of the last few years the industry has had, since the War, to meet a number of grave difficulties. Prior to 1914, British ships were responsible for 52 per cent of the carrying trade of the world, and for the four years preceding the outbreak of the War the average output of British shipyards was 60 per cent of the total world output. Great Britain was then producing nearly four times as much as her nearest competitor. She is still the greatest shipbuilding country in the world, but the effects of the War have been radically to alter the circumstances upon which her supremacy was originally founded.

The destruction of merchant tonnage during the struggle forced many countries to develop their own shipbuilding and ship-repairing resources. Consequently the world facilities for shipbuilding were very largely increased. During the fictitious boom which followed the conclusion of peace the world output of new ships rose to an unprecedented figure, and it very soon became evident that construction had outrun demand.³

Comparatively, British shipbuilders did not increase

¹ Sir James Lithgow in an address given before the Commercial Committee of the House of Commons, April 1st, 1925.

² *The Ministry of Labour Gazette*, November 1934, at p. 408.

³ An important factor in arresting the shipbuilding demand at this time was the "ton for ton" policy by which Germany had to replace torpedoed British ships; 453 German vessels were taken over, representing a tonnage of 2,025,249, and a total value of £20,993,885—which is equivalent to nearly two years' output from British shipyards.

their mercantile output as much as the rest of the world, though the exigencies of the War led to greatly extended capacity, but, because of their larger interest, they have suffered more than any other country from the results of over-production. Moreover, the slump did not drive the new competitors from the field. The growing spirit of nationalism took expression in foreign countries in a determination to build their own tramp and cargo services, as well as passenger ships. Various expedients were resorted to, such as the lengthening of the working week, remission of taxation, and, more recently, direct subvention by subsidy.

Up to 1934 the British industry has had to meet this challenge by its own resources. Apart from the period when the Trade Facilities Act was in operation it has had no assistance from the State, direct or indirect. It has been handicapped, in comparison with its foreign rivals, by very heavy taxation, and by the higher standard of living in this country. Derating has, however, given some measure of relief.

In all these ways the British shipping and shipbuilding industries have been penalised, and have not been able to meet their rivals on equal terms. Now, at last, Government action is promised for the protection of British shipping, and if the measures decided on are successful they will indirectly be beneficial also to the British shipbuilding industry.

II. THE EMPLOYERS' POINT OF VIEW

The view of the employers with regard to labour conditions in the shipbuilding industry is epitomised in a statement made in 1927 by the then Prime Minister, Mr. Baldwin. He described shipbuilding as the industry "which . . . has probably done more than any other industry in the country to set its own house in order." The employers consider that the post-War history of the industry supplies proof of this statement. All connected with shipbuilding have applied their energies to the improvement of organisation and output, and the difficulties which still beset them are due almost entirely to factors outside their control.

The nature of these external factors has been touched upon in the Introduction. It is, however, also necessary to give a brief outline of the internal history of the industry since the War, for it is upon the evidence collected and the

agreements reached during this period that the employers base their view. Such an outline will also give greater clarity to the subsequent analysis where working conditions are treated in detail and under separate heads.

As has been indicated, the post-War boom in shipbuilding was shortlived, and 1921 was marked by a wholesale cancellation of orders. For the purpose of clearing away the tonnage on the stocks that shipowners had cancelled, and to make room for new work at the new and lower prices, reductions in wages had to be made in order to make it possible to start rebuilding the industry on a new and lower basis of costs.

This, however, induced fresh efforts on the part of Continental rivals. In particular, the eight-hour working day was openly set aside, and every effort made to attract new and repair work. The seriousness of the challenge became fully apparent when, in 1925, a contract for five large British motor-ships was given to a German firm. All the British tenders were considerably higher than the German one which was accepted, and, moreover, it was authoritatively stated that if the men employed in British yards on the hull had worked for nothing on the contracts the British shipbuilders could not have taken the work at German prices. The immediate result was that the employers and the trade unions joined together in a complete and thorough investigation of the position and problems of the shipbuilding industry.

A proposal for a joint investigation was put forward by the employers at a meeting with representatives of all the shipyard trade unions held in London in March 1925. While special reference was made to foreign competition and conditions, the employers suggested a comprehensive "joint investigation into the circumstances and present position of the industry with reference to costs arising outside of the shipyards themselves, as well as costs arising within the shipyards."¹ The unions subsequently agreed to "a joint Committee of Inquiry to go into the position of the industry . . . with power to go into the whole of the facts submitted from all sides and report."²

An interim report dealing with the first stage of the

¹ *Report of Joint Inquiry into Foreign Competition and Conditions in the Shipbuilding Industry*, at p. 6.

² *loc. cit.*, at p. 7.

inquiry was published in October 1925. This covered (a) Hours, Wages, and Conditions prevailing on the Continent, as compared with Great Britain, and (b) Comparison of British and Foreign Prices in the Furness-Withy Contract. The trade unions, while agreeing to publication, reserved their decision on this part of the report until the second stage, dealing with costs outside the control of the industry, should be completed. The full report, containing both parts, was published in June 1926.

An important step was taken in 1929, when a scheme for national uniform time rates of wages was introduced. The scheme removed variations and anomalies in time rates by the introduction of an "industrial" national time rate for fully skilled workmen, and the same principle is applied in the case of unskilled time workers. When, in 1931, depression again overtook the industry and further wage adjustments were necessary, the employers did not alter the basis of wages but carried their policy of a more equitable distribution a stage further, and entered upon an examination of piece-work earnings. They maintained all the time-work wages, and obtained the necessary reductions by a readjustment of piece-work rates, bringing them to a level more nearly in accord with the wages of other workers.

One other action remains to be mentioned, namely, the formation, in 1930, of National Shipbuilders' Security Limited. The object of this is to meet the problem of excess building capacity, one of the most serious of the legacies of the War, by a process of ordered reduction in the number of redundant shipyards. Unlike the matters previously mentioned, this step in the process of reorganisation is necessarily the concern primarily of the employers. It is mentioned to show how completely the industry has reviewed the whole field of operations, and tackled the problems within its control.

In the opinion of the employers, the record here outlined shows how fully the industry "has set its own house in order." They point out that, in Great Britain, shipbuilding and shipping are vital to national existence. In most other countries these industries are desirable, but not essential, whereas to this country the maintenance of these industries in a healthy and progressive condition is a matter of self-preservation. In the detailed review of working conditions

which follows, the employers' arguments are developed and points on which they consider that further reform is desirable are indicated.

A. Recruitment and Utilisation of Labour. *Recruitment.*—Skilled labour in the shipbuilding industry is recruited through the apprenticeship system. There are no national agreements regulating admission to or conditions of apprenticeship, or the proportion of apprentices to journeymen, and the employers do not treat with the unions in questions affecting apprentices. The Federation has a model form of indenture designed to preserve the relationship of master and apprentice, and to prevent any interference by a third party.

The unions do not agree that apprenticeship is the concern solely of the employer and of the boy entering the trade. Some of them have ratios of admittance laid down in their rules, but in most cases the rule is designed not so much to limit the number of new apprentices as to ensure that apprentices shall not do too large a proportion of the work. This is an object with which the employers are in general agreement, subject to satisfying future labour requirements. Their attitude is that they are always prepared to investigate complaints regarding an excess of apprentices in particular instances, but that the position cannot be judged solely according to the position in a particular establishment at a particular time. The employers regard it as their duty to train sufficient apprentices, taking a long view of the future needs of the industry.

One of the great evils which has resulted from prolonged unemployment over a number of years is that the industry is gradually losing its skilled personnel in the yards. The number of insured persons registered as following the industry in October 1934 was only 156,550, whereas at the end of 1922 it was 358,640. As far as is practicable the employers must keep in view the requirements of the industry in relation to a return to more normal conditions.

The employers are anxious to preserve and encourage the high standards of craftsmanship for which the British shipbuilding industry is famous. Rapid developments during the past few years in electric-welding methods have provided an occasion for the pursuit of this policy, and the employers' aim is to create a new class of skilled workmen,

to be known as ship-welders. It is evident that this process is of great and increasing importance to the industry, and technique and efficiency must be developed to the full. The employers have a scheme for electric welders which provides for a careful training, and, on completion, the payment of the national uniform plain time rate for skilled tradesmen of 60s. per week. At the time of writing, the scheme, although it has been the subject of negotiations, has not been accepted by the unions.

Utilisation.—Demarcation restrictions used to be one of the great problems of the British shipbuilding industry. When the Joint Inquiry was investigating conditions in foreign yards it was found that Continental countries were able to obtain more economical costs and quicker dispatch on repairs because of their comparative freedom from restrictions of this kind. One reason for this is to be found in the very different form of trade unionism on the Continent, particularly in Holland. Trade unions in Holland are built up on a religious and political basis, and a single union will include skilled, semi-skilled, and unskilled workers. In such circumstances difficulties with regard to interchangeability are much less likely to arise than in England, where the unions are the inheritors of a strong craft tradition, and divisions have been intensified as new methods of construction have developed.

The Joint Inquiry considered the questions of interchangeability and demarcation, and in their interim report stated: "The introduction of sub-division of labour in British shipyards has no doubt gradually led to methods and practices which have prevented interchangeability, and we believe it is possible to secure greater elasticity and interchangeability without infringement of the broad principles of craftsmanship."¹

The report continues: "With this in view the employers request the immediate consideration of the following:

"(a) that in operations to commence and complete which two or more classes of workmen are under present conditions customary, there shall be freedom for one class of workman to complete the work when it is within their competence to do it;

"(b) that work which is not an essential and distinctive

¹ loc. cit., p. 11, s. 7.

part of the work of any one class, although it may be incidental or ancillary to one or more crafts, may be performed by anyone who is competent to do it ;

" (c) that where there is a definite shortage of any class of craftsmen, craftsmen of another class competent to do the work may be employed without prejudice to the work being regarded as an essential and distinctive part of the work of the first craft, and if the rates of the two crafts are different, the higher rate will be paid."¹

The employers gave the classes of work for which interchangeability was asked, and examples are given in Appendix A to this report.

The unions collectively did not accept the employers' proposals on demarcation problems, holding that the proposed modifications should be taken up separately with the unions concerned in each case. Nevertheless, since the inquiry, and especially after the introduction of the uniform wages scheme which removed differences of wages between the crafts, there has been a marked diminution in the number of demarcation disputes.

The settlement of such disputes is governed by a special demarcation agreement, which provides for a joint committee of nine persons—three drawn from the employers, and three each from the two trade unions concerned—to settle each demarcation question as it arises. None of the representatives may be in any way connected with the shipyard in which the dispute has arisen. Recently a number of these committees have reached unanimous decisions, a very notable advance on the past, and the employers feel that demarcation disputes as a serious problem are disappearing. In repair work, where labour cannot be organised to the same extent as in actual shipbuilding, it still has irritating effects, and may lead to added expense ; but here, also, the machinery for settlement is proving satisfactory and disputes are no longer of frequent occurrence.

B. Hours and Wages. Immediately after the Armistice the shipbuilding employers, in conjunction with the engineering employers, and in agreement with the unions, introduced a forty-seven-hour working week. In

¹ loc. cit., s. 8.

the course of the Joint Inquiry evidence was collected showing that foreign shipbuilders, while doing lip service to the principle of an eight-hour working day, were in fact using special dispensations and other means to operate a longer working week. This imposed a very real handicap on the British industry, and the Joint Inquiry drew the attention of the Minister of Labour to the facts which had been ascertained, pointing out that, while there was no intention to increase the regular working hours in British yards, "an international competitive race in hours of work would seriously jeopardise the general standard of working life."¹

It is satisfactory to find that most foreign yards have now returned to a regular working week of forty-eight hours.

The working of overtime in the shipbuilding industry is regulated by a national overtime agreement. On new shipbuilding the agreement permits overtime up to a maximum of thirty hours per man in any four consecutive weeks, but at the present time advantage is rarely taken of the provision. In new work overtime is only needed where there have been delays in obtaining materials, or in order to open out work for other trades, or to keep launch dates, or where the work is controlled by tides. The agreement deprecates the systematic use of overtime as a means of production, and the employers state that they are always willing to investigate any cases where the unions claim that the letter and the spirit of the agreement are not being observed.

Repair work is in a different category, and overtime is not restricted except in so far as the extra expense involved limits its use in practice.

With regard to wages, the Shipbuilding Employers' Federation is developing a very comprehensive policy of rationalisation. The Joint Inquiry established that hourly rates of wages in Germany and Holland were lower than in England, but it was impossible, having regard to differences in standards of living, to compare the relative productivity per £1 of wages in this country and those countries. Another reason for differences in wages costs is to be found in different classifications of workers. Riveters, caulkers, drillers, and plumbers, for instance, who are recognised as skilled men in this country, are

¹ loc. cit., s. 2.

classified in Holland as second-grade workers, and paid accordingly. Similarly, some of the men who are regarded in Britain as semi-skilled—such as platers' helpers and holders on—are classed and paid in Holland as unskilled.

British employers have no desire to follow foreign standards of classification. On the contrary, the wages scheme which was put into operation in 1930 and extended in 1931 has been devised to bring about a more equitable distribution of wages, and to remove anomalies which had crept into the wage systems in the industry, particularly as a result of war conditions.

The first stage was the establishment of national uniform time rates of wages, agreed between the Employers' Federation and the shipyard trade unions in 1929, and put into operation in 1930. With certain exceptions, the scheme provided for :

(1) A national uniform new-work time rate for fully skilled time workers twenty-one years of age and over, of 60s. per week, composed of 50s. basis rate and 10s. bonus.

(2) A national uniform new-work time rate for unskilled plain time workers twenty-one years of age and over, of 41s. per week (31s. basis rate and 10s. bonus).

(3) Semi-skilled plain time workers on new work to receive the same advance as unskilled workers in each district, thus preserving the existing margins between unskilled and semi-skilled workers in plain time work.

(4) Repair workers, where paid a recognised allowance above the new-work rate, to be paid an extra 6d. per day or 3s. per week on the new uniform rates.

In 1931 further developments brought the uniform time rates into almost complete operation for all classes in all districts. Then a further stage in the employers' wages policy was introduced. "The 1931 scheme can be regarded as the first serious attempt to grapple with the enormously intricate problem of the piece-work and allied systems of payment. . . . Introduced primarily with the object of reducing labour costs, it swept away many anomalies in the distribution of the industry's wages bill, which have been the source of endless discontent for many years in the various districts."¹

The scheme is of a very intricate nature. It involves,

¹ *British Shipbuilding Wages in 1931*, reprinted from the *Shipbuilder and Marine Engine-builder*, January 1932, at p. 3.

for men working on other than plain time rates, the withdrawal of a time-work bonus of 7s. per week, granted in 1924 as "amelioration" money to meet high cost of living, and also of certain wartime payments. Riveting squads employed on piece work are specially treated; and provision is made for consideration to be given to cases of exceptional hardship affecting any class of workmen under the scheme.

This scheme, like the earlier one, was fully discussed in conference with the unions, and the latter decided to accept the scheme in effect by recommending their members to work under its terms, though entering a nominal protest. "The fairness of the scheme of the Shipbuilding Employers' Federation in lightening the incidence of the sacrifices in the case of the work-people with lower earnings was, however, generally appreciated in the end. Many of the unions' representatives recognised that in this respect the scheme applied principles of which they had been strong advocates industrially and politically for many years."¹

The scheme, though far-reaching in its effects, is not all that the employers desire. Though the employers dealt with the riveters with due consideration of the fact that in many cases their earnings were below those of corresponding classes of platers, they are not satisfied with the existing methods of constituting riveting squads and of dividing their earnings. They consider that the employment of adult rivet heaters is unnecessary, except in special cases, and the employment of adults on what in earlier times was recognised as a lad's job takes from the riveter too great a proportion of the piece-work price. The employers hope that, sooner or later, the tradesmen will embrace the opportunity of revising the existing methods and arranging a common basis for the division of earnings between members of riveting squads.

In the opinion of the employers, the policy of wage rationalisation has already proved of immense value. Not only have many anomalies which were fruitful causes of dispute been removed, but the employers have been able to maintain the uniform plain time rate through the very heavy depression of the last three years. Another and even more important step, however, is still required, namely, the discovery and adjustment of an index for the

¹ loc. cit., at p. 6.

automatic regulation of general wages fluctuations. The ultimate fate of the industry depends upon its capacity to meet international competition on strictly competitive lines. If British shipbuilding is to be restored to prosperity, one essential is that labour costs shall be calculated with due regard to the ability of the industry to pay. The employers' object, in proposing the establishment of an index, is to ensure that this essential is recognised, and at the same time to guarantee to the workmen a full share of any prosperity which returns to the industry. The unions have promised to investigate the proposal jointly with the employers, and, though the task is heavy, a satisfactory solution will be of immeasurable importance to the well-being of the industry.

C. Other Conditions affecting Output and Efficiency.

In shipbuilding, as in many other industries, the great increase in the use of machinery has raised serious problems. The President of the Employers' Federation, Mr. John Barr, when inviting the unions to take part in the Joint Inquiry, said :

“ The full use of machinery and facilities is being made almost prohibitive by want of proper accommodation between the unions and ourselves. There surely can be no doubt in anyone's mind that the more labour-aiding machinery we can have the better we are equipping the industry and at the same time the better are we making the status of the worker. But for the proper organisation of the industry we must have greater facilities in the use of machinery and in the use of labour. Nothing can be gained—indeed, there is everything to lose—by our closing our eyes to the proper evolution in industry and holding on to practices which, though of respected age, may be a complete hindrance to the proper development both of the crafts and of the industry.

“ In so far as the introduction of up-to-date machinery is impeded, or in so far as its installation adds to costs instead of lessening them, we are as an industry inflicting a further handicap upon ourselves in competing with countries who are developing their shipbuilding resources free of restrictions and past customs.”¹

¹ *Foreign Competition and Conditions in the Industry.* Statement by John Barr, C.B.E., at p. 8.

During the course of the Joint Inquiry this problem of facilities was considered, and the interim report, which was signed jointly by the employers and the trade-union representatives, contains the following statement :

“ We recognise that in the interests of the proper organisation and evolution of the industry the use of labour-aiding machinery is to be encouraged. We believe also that in the present state of trade and world competition it is the duty of all parties to secure for the industry as a whole all such savings in cost as can be obtained from the fullest use of machinery and methods conducive to economic output.”¹

In the employers' opinion it is unnecessary to employ craftsmen on many modern machines, and they find that to do so prevents full benefit being obtained from improved machinery. While certain machines are recognised in the shipbuilding industry as semi-skilled, there are others which in shipyards are operated by skilled men, whereas in engineering, in the motor-car industry, and in foreign yards they are operated by second-grade or, on the Continent, even third-grade men. The employers find that the insistence of the shipyard trade unions on what they term the displacement principle—that is, that workmen who are displaced by a machine should be given the first opportunity of working the new tool—does operate to prevent full benefit being obtained from improved facilities.

Difficulties are experienced in fixing economic rates for machine work, and also in connection with the readjustment of the manning complement to improved appliances. Some unions are very reluctant to abandon old methods of payment and of allocation of work, despite changed conditions and the urgent needs of the industry. Overmanning still takes place. During the last ten years employers, both locally and nationally, have repeatedly pressed for the review and improvement of existing arrangements in this respect. Some progress has been made, but there is still a good deal to be done.

With regard to piece work the difficulty is to obtain adjustments, and proper deductions for improved facilities. Many old piece-work price-lists are still in operation in the industry. Some modifications have been made, but

¹ loc. cit., s. 10.

generally the settlement reached is in the nature of a compromise, by taking a percentage deduction from the old basis price. This process operates disadvantageously, since it often retains as a basis of calculation a price fixed generations ago. It is manifestly wrong, for instance, that the rates of piece-workers working with the help of elaborate derricks and gantries are calculated on a basis related to hand work and bare scaffold-poles.

The policy of the employers is to take every possible opportunity of fixing piece-work remuneration in direct relation to the method or process employed and the work to be done; on the extent to which the piece-work price is put on to a modern basis depends the question of whether full use and advantage is made of improved facilities.

In some cases where the employers would welcome a clear re-casting of existing arrangements, progress is difficult because of the conflicting interests of the unions, and the craftsmen and their assistants. An instance is to be found in the question of the division of plating-squad earnings. The platers are on piece work, and they have squads of helpers, whose numbers vary, who are paid an enhanced time rate. The National Union of General Workers, which has organised the platers' helpers, has repeatedly tried to get the employers and the Boilermakers' Society to adopt a system by which the helpers would be paid on an output basis, but the boilermakers have always refused. The Employers' Federation have agreed in general terms that they would like to see all members of piece-work squads paid on an output basis, but, in the absence of more agreement among the workers, it has not been possible to arrange a tri-party conference.

That solutions of such problems can be found is shown by the somewhat similar case of the blacksmiths and their assistants, who are called strikers. The two unions concerned were the blacksmiths' and the Amalgamated Engineering Union; conferences resulted in agreed arrangements for putting into operation the principle that piece-work blacksmith assistants should share the piece-work earnings in a fixed ratio, instead of, as was the former practice in certain districts, being paid an enhanced time rate which did not fluctuate with output.

APPENDIX A

*Continuity of Work : Interchangeability*¹

A. Continuity. In operations to commence and complete which two or more classes of workmen are, under present conditions, customary, there shall be freedom for one class of workmen to complete the work when it is within their competence to do it.

EXAMPLES :

Hole Boring. Any trade may bore and tap odd holes as they require them in connection with their work.

Lining-Off. Platers may line off on board ship when their work is involved.

Fairing. Shipwrights may hang up templated or multiple work required for fairing.

Cutting out Rivets. The trade that drills or burns the rivet may do their own centring, punching back, and re-counter-sinking, if necessary.

Wood Cants and Coamings. The trade fitting the wood bulkheads and partitions may also fit wood cants and coamings carrying the bulkheads and beam runners.

Piping. Engineers and Plumbers may make sets and make, fit, and complete any systems which at present are worked jointly.

Electric Wiring. The Electrician who does the wiring may also fit blocks to take pushes and switches.

Plant Maintenance. The electrical department may do all work in connection with electrical motors, switches, and wiring.

B. Interchangeability. Work which is not an essential and distinctive part of the work of any one class, although it may be incidental or ancillary to one or more crafts, may be performed by anyone who is competent to do it.

EXAMPLES :

Planing Decks. Either Joiners, Shipwrights, or other Woodworkers may plane decks as found convenient.

Insulation. Either Joiners or Shipwrights may carry out insulation of cargo and stores spaces and all woodwork in connection therewith.

Deck Fittings. Either Shipwrights or Joiners may fit bucket racks, seats, lockers, binnacles, telegraphs, telegraph cases, and such like fittings.

¹ Extract from *Joint Inquiry*, Appendix F, pp. 33-39.

Wood Rails. Either Shipwrights or Joiners may fit and finish all wood rails and fit metal fittings.

Side Lights. Either Caulkers or Drillers may cut, burn, and drill the holes and fit the side lights complete.

Ventilation. Either Sheet Ironworkers, Sheet Metal Workers or Tinsmiths, Plumbers, or Platers may line off, make, fit, and secure all sheet-iron lining.

Ventilator Trunking. Either Sheet Ironworkers, Sheet Metal Workers or Tinsmiths, Plumbers, or Platers may line off, make, and secure in position complete.

Ship-Repairing

The foregoing schedule shall also apply to ship-repairing with the following additions :

A. Continuity.

Rudder Collar. Removal of the rudder trunk collar for access and replacement may be carried out by the trade that lifts the rudder.

Temporary Steam and Compressed Air Pipe. The trade which fixes up the temporary pipes may disconnect the pipe at the valve and remake joint.

Manhole Doors. Men requiring access may take off odd man-hole doors.

Staging on Repairs away from Establishment may be done by the trade using same.

Small Iron Repairs. Any one of the following trades may carry out in their entirety small iron repairs such as washport doors, hatches, ventilators, and such like fittings, namely : Riveters, Platers, Caulkers, Drillers, Blacksmiths, Sheet Ironworkers.

Side Lights. Any one of the following trades may execute work on side lights in its entirety, including rejoining, namely : Caulkers, Drillers, Plumbers, Fitters.

Hold Pillars and Ladders. Any one or more of the following trades may execute repairs and renewals in their entirety, namely : Shipwrights, Blacksmiths, Drillers, Riveters, Platers.

B. Interchangeability.

Lifting Rudder for Examination. Either Shipwrights or Fitters (with their assistants respectively) may disconnect, lift rudder for examination, and replace.

Temporary Steam and Air Pipes. Either Fitters or Plumbers may fix and remove.

Smith Work. Either Angle-Iron Smiths or Blacksmiths may carry out smith-work repairs.

General. Any small item of repairs urgently required on a vessel away from the works or about to depart may be done by any workman available and competent.

Footnote—Submitted to Joint Committee on July 29th, 1925. We recognise that it is desirable to consider for the future, both in the ironwork and woodwork trades, a wider basis of apprenticeship which, besides maintaining and developing the skill of our craftsmen in the several branches of the trade, will assist elasticity in continuous and interchangeable operations.

III. THE TRADE-UNION REPLY

The trade unions in the shipbuilding industry draw attention to the severe difficulties which the industry has had to face since the War, and, like the employers, they are proud of the efforts which have been made to overcome these problems. They have found the conciliation machinery very satisfactory in operation, and they comment particularly upon the advantages of an independent chairman as a channel through which all the necessary information upon the issue under discussion can be obtained.

A. Recruitment and Utilisation of Labour. *Recruitment.*—The system of apprenticeship by which skilled labour is recruited for the industry (p. 278) is the subject of criticism from the unions. They believe that methods of training have become unduly specialised, and that the employers, by encouraging such specialisation, have materially helped to bring about that rigidity of demarcation and lack of interchangeability of which they complain. "They have taken clever boys who were to serve an apprenticeship as iron shipbuilders, and, instead of teaching them the methods of using iron and steel in all its branches, which would include smithy work, riveting, plating, the use of drilling, counter-sinking, and plating machines, etc., they have drafted them on to work and trained them, say, in the plating section only. With the very complete sub-division of labour that exists, all a lad's apprenticeship would be devoted to one section of the trade." A boy will be trained solely in one section of, for instance, wood-working or boiler-shop work, because the employer finds that, by this method, he can be made of use early in his training, and costs of production thus

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lowered. The unions, on the contrary, believe that "a boy should be given a thorough all-round training, under the direction of the employer's staff, and with the aid of day schools, so that, after he is thoroughly trained, he may be drafted to such section as he has proved to be best qualified for."

The employers in the shipbuilding industry have always taken the view that apprenticeship is the concern solely of themselves, the boy, and his parent or guardian (p. 278). The unions do not subscribe to this view, and, in addition to the reforms they suggest in methods of training, they are of the opinion that there should be some limitation of entry to the skilled grades in the industry. They feel that this is necessary to safeguard the interests of their members.

One of the most powerful unions in the industry, the boilermakers', strongly recommends the limitation of apprentices in order to prevent the market being flooded by cheap labour. The union has special branches for apprentices, and exercises careful supervision over their training and progress. Prior to 1910, the union had agreements with the employers, in which they jointly undertook to regulate and look after the apprentices. "Neither the employers nor the trade union were satisfied with the conditions of this agreement, and as a result it lapsed, so now the union carries on its own method of recognising the apprentices, and of taking an interest in the boys and seeing they are taught their craft in a proper way."

In the opinion of the unions, the recent decision of the employers to create a new class of skilled workmen, known as ship-welders, to undertake electric welding (p. 289), is a retrograde step, and will cause further unnecessary subdivision of function. There are already plenty of men in the industry who, with a little extra training, would be competent to undertake this work, and the unions feel very strongly that these men have a prior claim. In their opinion, to create a new class of craftsmen is to run the risk of increasing those demarcation problems of which the employers used so frequently to complain.

Utilisation.—The prospect of a new trade and fresh demarcation barriers is the more to be deplored since the unions have recognised the need for moderation in the demands and ramifications of their crafts. The employers

themselves admit that demarcation disputes are not now a really serious problem (p. 279), and the unions join with them in expressing satisfaction with the machinery for settling such disputes. They also agree that the uniform time rate of 60s. per week for skilled time workers has had a stabilising effect.

Where demarcation troubles still exist the unions are of the opinion that the greater measure of blame lies with the employers themselves, who, for their own purposes, and in order to cheapen production, have specialised in certain methods of production, and have given their apprentices a sectional training only. The men cannot be blamed for clinging obstinately to that portion of their craft which is all that they have been permitted to learn. "Owing to the lack of proper training, it is impossible to have interchangeability amongst the different sections of a trade. The remedy lies in a greater all-round training of apprentices." "If the apprenticeship training were broadened, and not confined to a small section of the trade, there would be less trouble about demarcation questions." It is no doubt true that there are some anomalies which could be removed, and the Federation "would raise no objection to the employers convening a conference between their organisation and the trade or trades concerned." But it refuses to sit down collectively to discuss problems affecting only certain trades or one or two trades. It is for this reason that, while accepting the interim report of the Joint Inquiry with regard to questions of interchangeability and demarcation, the unions have taken no further action with regard to the employers' proposals which are set out on pp. 279-80. They hold that the way to deal with such problems is by negotiations on individual instances rather than by broad generalisation.

B. Hours and Wages. The present arrangement in the shipbuilding industry is for a forty-seven-hour working week, with provision for the working of overtime up to a maximum of thirty hours per man in any four consecutive weeks. The unions are of the opinion that the normal working hours should be reduced to forty per week, and are about to raise the question in negotiations with the employers. Since the matter is, in effect, under discussion it would not be proper to comment upon it here.

With regard to wages, the employers draw attention to their policy of rationalisation, and in particular to the national uniform new-work time rate established in 1980, and to the 1981 scheme relating to piece work (pp. 282-88). The former was accepted by the unions, but in the latter case they registered "failure to agree." Owing to the depression they did not feel able to stand a national lock-out, but they regarded—and continue to regard—the scheme as an imposition.

On the whole question of wages the unions are very strongly opposed to the policy of the employers in using wage reductions as a method of reducing costs. "The employers are getting the benefits of rationalisation, of improved technique, of increased production per unit, and, on top of this, they want to reduce wages. Not only have they obtained a large reduction in the number of men employed in the industry, but they have also obtained an increase of 20·7 per cent in the output per man." In 1920 there were 812,160 workpeople employed in shipbuilding and ship-repairing; the tonnage launched per man was 6·6, and the net output per man £169. The comparative figures in 1930 were 141,418, 10·4, and £210. The Federation of Trades believes that these facts and figures show conclusively that the workman has borne his full share, and more, of the sacrifices which have been made to meet the difficulties with which the industry has been faced since the War, and holds that there is no case for further reductions in labour costs.

On the general question of the respective merits of time and piece work the unions point out that there has always been a certain amount of piece work in the industry, though the extent to which it is in operation varies in different sections. There is a good deal of difference of opinion among the men on the matter. Piece work is sometimes opposed on the ground that it is impossible to safeguard against continual attacks on the rates by the employers; another argument is that any such system must operate to increase unemployment. As the speed is increased, so there is a tendency for the quality of the work to fall,¹ and for

¹ Attention was drawn to the connection between piece work and the accident rate in the industry. "Piece workers will occasionally take risks, if the avoidance of them involves loss of time and consequent loss of earnings."—*Report of the Departmental Committee on Accidents in Shipbuilding and Ship-repairing, 1924*, at p. 9.

the men to feel "that the employer is trying to get the most out of them, so they will get the most they can out of him."

Among the boilermakers the majority of the men work on piece, "but the union has always felt that it was not the best system. In the rules of the Boilermakers' Society it is stated that it is not in our interest to work piece work. Except where we are compelled to work it, we should not begin it or introduce it as individuals anywhere, but consult with our fellow members of the shop, and, provided a majority are in favour of it, then a collectively negotiated price should be arranged before it is introduced." This statement summarises the position of several of the unions. With regard to the example given of the plater and his helpers' squad (p. 286), the boilermakers point out that the rates paid have been arranged between the two unions, and are independent of the piece-work earnings. The plater is a fully skilled man; he has to organise the work, and carry a good deal of responsibility. The union does not seek to justify his being paid on piece rates, but points out that "it would be difficult to arrange any other more satisfactory method than the one that has panned out so well in practice and is in operation to-day."

With regard to the constitution and payment of riveting squads, concerning which the employers express dissatisfaction (p. 283), the unions do not agree with the proposal that boys should be employed. They point out that the suggestion has never been officially put forward for discussion, and, if it were, "they would strongly oppose it on the grounds that the changes in methods of production, together with increased speeding up, make the employment of youths for this work no longer suitable."

C. General Conditions affecting Output and Efficiency.

The unions, like the employers, realise that the increasing use of machinery must give rise to problems of great difficulty. They do not wish to prevent the best use being made of new inventions and improvements, for they realise that, in the long run, these must benefit the industry. Despite the high standard of the craftsman's work, they "admit that generally the introduction of machinery does not lessen or weaken the completed job." Nevertheless, they feel that the workman deserves some

consideration. As a rule, auxiliary machines have expedited the work and increased the output, but "the manual labour has not diminished." Therefore they do not consider it right that the men should be asked to accept cuts in their wages (pp. 284-85), though one union states that its members are always ready to agree to a temporary deduction to help to meet the overheads consequent on the introduction of the new machine.

Further, the savings to the employers in the form of reductions in labour costs which have resulted from increased mechanisation are very considerable. The new method of firing furnaces, for instance, has meant a 50 per cent reduction in the number of men employed. Again, six men have been displaced by each of the new single drill punching-machines, with gear-belt and driving-table, which are operated by a single workman. These are not isolated instances, and, while the unions agree that price-lists may need revision in the light of new methods of production, they contend that there is no ground for general wage reductions.

With regard to the general question of craftsmen doing machine work (p. 284), the craft unions hold that preference should be given to their members whom the machine throws out of employment. They have tried to insist on this, not just to provide for their unemployed, but because. "in our opinion, a man who has had the training which enables him to know what a job should be when completed is certainly preferable to a man who, by his up-grading, works any new machine. . . . In our view, the man who has formerly done the job by hand knows much more about what the job would be in the way of measurement, and what is required for its stability, and what is expected of it, than the man who has had no experience other than possibly being able to manipulate the machine. The displaced man should have preference because of his experience in turning out the work prior to the introduction of the machine."

IV. SUMMARY

Employers in this industry do not suggest that they are handicapped to any considerable extent by trade union restrictions. They refer with pride to the way in which the industry has met the problems of the post-War period,

and describe the methods by which it "has set its own house in order." The difficulties have been great, and both employers and unions have faced them with courage. Causes of friction have been overcome—notably, demarcation disputes are now much less frequent than they were—and the new procedure agreement is approved by both sides.

Nevertheless, there are issues which, if not urgent at the moment, may cause difficulty in the future. The unions are not satisfied with certain aspects of the wages policy of the employers, and only accepted the 1931 scheme under protest. The employers, however, while complaining of difficulties in the revision of price-lists, do not suggest that trade-union policy with regard to wages in general is restrictive.

The chief matter which the employers raise concerns the employment of craftsmen on machine work. In their reply the unions relate this question to the whole matter of the status and future of the craftsman. They are greatly concerned that the tendency in the industry is steadily to diminish the scope of employment open to the skilled man who finds that his years of training now give him no security of employment. In the opinion of the unions the position of the craftsman is the key, not only to questions of mechanisation, but to matters of up-grading and interchangeability. They contend that the employers give too specialised a training, and that this, combined with lack of security of employment, prevents that greater measure of flexibility which the employers desire.

Both the training of apprentices and the numbers admitted are matters which the employers regard as outside the competence of the unions. The responsibility for the adequacy of the training therefore rests with them. Nevertheless, the union argument does not dispose of the fact that craft rules may prevent a man from undertaking work which his training may qualify him to perform adequately. The second point advanced by the unions is more pertinent. Why refuse to agree to a limitation of the number of entrants when over half of the men already qualified are out of work? If demarcation barriers were lowered, unemployment would become even more serious. It appears unreasonable to expect the men further to curtail their already slender chances of employment without at

the same time assuring them of some protection from unlimited competition.

Whatever the opinion of the employers may be as to the future of the craftsman in the industry, they cannot be held entirely responsible for difficulties which arise in the course of normal industrial development. It is sufficiently clear that increased mechanisation must involve the displacement of labour, and, while this may be only temporary, the time lag must mean an immediate rise in unemployment. The employers hold that the unions add to these difficulties, and they adduce good evidence to support their contention. It must be admitted that, in general, less skill is required to run a machine than to do by hand the work that the machine now undertakes. While there are good grounds for arguing that the displaced craftsmen should be given employment on the new process as far as possible, that is no ground for asserting that such machine work shall always be the prerogative of the skilled man. The employers make a good case for the introduction of a grade of semi-skilled labour for this class of work. They have equally strong justification for contending that the introduction of mechanical auxiliaries should be accompanied by a revision of piece rates. It may be, as the unions assert, that the manual labour required is not diminished, but, if the rate of production is sensibly increased, then the basis on which the original rate was calculated no longer applies, and a fresh assessment is necessary.

In general, however, employers in this industry have not advanced much definite evidence of restriction. They have confined themselves to a general statement showing that they are fairly well satisfied with the existing position.

TEXTILES : WOOLLEN AND WORSTED INDUSTRY

I. INTRODUCTION

THE WOOL TEXTILE INDUSTRY in Great Britain is centred in the West Riding of Yorkshire, the south of Scotland, and the west of England. In October 1934 there were, according to the Ministry of Labour returns, 229,590 insured persons registered as being, or having last been, in the employ of wool textile firms ; of whom 14.4 per cent were wholly or temporarily unemployed. Normally, some 80 per cent of the workers are employed in the Yorkshire mills.

The industry covers a number of processes, and the two branches are organised on different lines. In the report of the Court of Investigation of 1925 a description of the industry was given, and employers and operatives have confirmed its accuracy. It runs as follows :

“ There are two principal sections in the wool textile industry ; the worsted section and the woollen section. The raw wool is first sorted into different grades according to quality. In the case of the worsted section it is combed in order to extract and make parallel the long filaments. The combed wool, after rejection of the short fibres, is known in the trade as ‘ tops,’ and is the raw material for the worsted spinning section. In the case of wool intended for woollen cloth there is no combing. In addition to new wool the woollen section uses the short fibres, known as ‘ noil,’ also wool recovered from worn-out garments and hosiery, and other waste products. The subsequent processes in each section are spinning, weaving, dyeing and finishing.

“ In the worsted trade, it is usual for one firm to carry on only one of the operations of combing, spinning, weaving, or dyeing and finishing. Firms known as

‘top-makers’ buy wool raw and sell wool combed. The top-maker’s wool goes either to his own combing shed, or as is more usual, to that of a commission comber. Similarly, the dyeing of worsted cloth is done on a commission basis by firms of dyers. In the woollen trade there is continuity between the various processes, and it is the general practice for one firm to carry out all operations from the handling of raw wool to the finished product, including dyeing and finishing.”¹

The employers in the wool textile industry have a series of carefully graded organisations. There are thirty-one district associations or federations. Prior to and in the early years of the War, in reply to attempts by the unions to play off one district against another, federations of associations were formed, such as the Woollen and Worsted Trades Federation and the Worsted Spinners’ Federation. Later, when it became necessary to co-ordinate wage rates in the different sections of the industry, the Wool Textile Employers’ Council was formed, consisting of representatives from the main federations. In 1919, the employers, through the Employers’ Council, joined the National Confederation of Employers’ Organisations, and in 1921 established the Wool Textile Delegation as a central body to deal with commercial matters affecting the industry.

The operatives are not so strongly organised as they were prior to the dispute over the Macmillan Award. In the more prosperous days fully 60 per cent of the workers were members of one or another of the unions, but the proportion has dropped to about 40 per cent. Organisation is best among the craftsmen, and their unions claim to control most of the key positions. On the other hand, in the worsted section, where a large number of juveniles are employed, there is little real organisation of labour.

The National Union of Textile Workers is the major union in the industry. This body has taken a leading part in promoting the National Association of Unions in the Textile Trades with the object of bringing the workers of all branches in the industry into closer co-operation. In the past the unions have not always combined to pursue a common policy, but recently the National Association has

¹ From the report of the Court of Investigation, quoted in the Macmillan Report, at p. 8.

revised its constitution, and it now includes all the more important organisations in each branch of the trade, with the single exception of the National Society of Wool-combers.

In accordance with the suggestions in the Whitley Report, the National Wool (and Allied) Textile Industrial Council was established in 1919, for the purpose of providing machinery for negotiating wages agreements in the industry in England and Wales. The council, which is composed of representatives of both employers and operatives, took over all existing agreements affecting wages and conditions of employment. Three district councils were formed under the national council, one for the northern counties, one for the west of England, and one for Wales.

The machinery provided by the Industrial Council did valuable work until 1925, when the Northern Counties' District Council failed to settle a wages dispute. The employers asked for a reduction of wages and the operatives for an increase, and finally both sides—the employers under pressure from the Government—consented to the appointment of a Court of Investigation. In November 1925 the court presented a unanimous report, of which the general conclusion was as follows :

“ We have carefully considered the detailed evidence and contentions of the parties. That the industry is depressed at the present time is not really in dispute. It is, however, a matter of contention between the parties as to whether that depression is likely to persist, but further experience is necessary before any definite conclusions can be arrived at as to the developments of foreign competition in Europe and the Far East. In our view the evidence before us is insufficient to justify a general reduction in wages ; on the other hand, a case has not been established for a general increase in wages, which are at present above, and in some cases considerably above, their pre-War level, after allowing for the increase in the cost of living.”¹

The court therefore recommended that the existing wages position should remain unaltered until January 1st, 1927.

In October 1927 the employers gave notice to terminate the existing wages agreement, and there followed prolonged

¹ Quoted in the Macmillan Report, at p. 7.

negotiations for the readjustment of the wages scale. Again the machinery of the district council proved ineffective, and in 1930 the Minister of Labour constituted a Court of Inquiry. The court, in the Macmillan Report, recommended that the Joint Industrial Council should make an agreement on the basis of a general reduction of about 9½ per cent for time workers, with a proportionate reduction for piece workers, but the unions refused to enter into an agreement on these lines. There was a stoppage lasting in different districts from nine to fifteen weeks before the reduced rates were put into general operation.

The Joint Industrial Council, therefore, has not fulfilled its proper function since 1925. The employers and the operatives no longer meet together for joint negotiations, and such uniformity of practice as now exists in the trade is only maintained through the employers' council. This body has endeavoured, not always successfully, to prevent individual members of the Federation from reducing wages on their own account, though a further general reduction of 11·7 per cent took place in 1931.

The history of the disputes leading up to the present position in the industry has been given in some detail for two reasons. In the first place, the unions, especially since the dispute following the Macmillan Award, have lost so much in influence and in membership that to-day the employers meet with little opposition from them. Secondly, an analysis of the evidence advanced by the employers in 1925 and again in 1930 shows that their whole effort has been directed towards securing a reduction in wages. They do not complain of restrictive practices by the unions, and they do not, with one very minor exception, advance any arguments to show how output might be improved.

There is one other important aspect which cannot be omitted from a description of the textile industry. In common with other trades, the industry has suffered severely during the depression of the last few years. The home trade has remained approximately constant, but in exports there has been a steady decline since 1924. Political troubles in China, the high tariffs imposed by Japan and the United States, and exchange difficulties in Australia and South America, supply a partial explanation, but it appears that there must be other causes as well. For from 1924-29, while British exports were falling, the

official trade statistics of Belgium, France, Germany, and Italy show a steady increase in exports, especially in yarns. The British figures for the present year, 1938, are more encouraging, but it is too early as yet to judge whether the improvement is likely to be permanent.

II. THE EMPLOYERS' POINT OF VIEW

A feature of the wool textile industry is the large number of firms engaged in the trade. These vary greatly in size, though the tendency is towards a reduction in the number of small firms. The multiplicity of organisations has been the subject of some comment, and the employers' explanation is that the industry necessarily requires great variety and individuality in its products. They assert that the efficiency of the trade as a whole does not suffer to any appreciable extent from this sub-division.

A. Recruitment and Utilisation of Labour. There is a high proportion of young workers in the worsted section of the wool textile industry, and a fair proportion in the woollen section, but apprenticeship is not the normal means of entry to the trade. The textile industries are, for all general purposes, based on production by automatic or semi-automatic machines, and there is not the same need for any definite or prolonged training such as exists in the handicraft industries. In the Ministry of Labour Inquiry of 1925-26 (Vol. IV., p. 22), returns were received from 594 firms employing over 80 per cent of the total number of workpeople in the industry. Two-thirds of these firms did not employ either apprentices or learners, and the rest made returns showing that about 5 per cent of their employees were undergoing some kind of training. Moreover, the use of the term "learner" does not imply in this industry—as it does, for instance, in engineering or building—definite instruction or facilities for learning for a certain period. It often means either a juvenile worker who is undergoing a short period of intensive training or one who is performing very simple operations while awaiting a vacancy at a machine or in another department.

Apprenticeship or learnership proper is principally found in the case of boys among overlookers, wool-sorters and maintenance workers, whilst among girls it is practically

confined to the occupations of looker and examiner, and of burler, darning, and mender. The wool sorters', weaving overlookers', and warp twistors' trade unions have rules attempting to limit the number of recruits entering these trades, but there are no agreements with the employers on this subject. The fear was expressed by the secretary of one employers' federation that this policy would result in a shortage of skilled workers when trade revives. At present, however, there is little of which to complain.

Several employers mention the Yorkshire Association of Power Loom Overlookers in this connection. Members of this union are responsible for supervising the running of the looms in the weaving department, and are thus in a key position. In the past this union was probably the strongest in the industry, and attempts were made to limit apprenticeship in this department. One firm reported a recent dispute with their tuners, but the firm refused to assent to any principle of limitation.

As regards the utilisation of labour, the employers have little to say. One employer makes the general statement that "the demarcation and other practices which operated prior to the dispute have now largely disappeared," but he gives no details. In the course of their published evidence to the Court of Investigation the representatives of the employers did not complain that production was hampered by demarcation disputes or by trouble between skilled and semi-skilled grades of labour.

B. Hours and Wages. It is the contention of employers in the wool textile industry that the refusal of the unions to agree to reductions in the wage rates is the worst "restriction" from which they suffer. This inquiry naturally does not call into question the great work which the trade-union movement has accomplished in raising the standard of living of the workers in this country. Nevertheless, there are occasions when a determination to maintain or to raise existing wage levels in a particular industry must be classed as restrictive action. The point is put very clearly by Lord Macmillan. "I do not think that any good can come of pursuing an abstract argument whether the present wages should be regarded as too 'high' or too 'low.' These are relative terms, and the practical matter for consideration must always be the

relation of wages to the industry's capacity to pay."¹ In the opinion of the wool textile employers, wages are a paramount issue. As they stated in evidence before Lord Macmillan, "there are only two alternatives: a substantial reduction of wage rates, or a bleeding to death of the industry."²

The court concluded that the evidence justified a reduction in wage rates, though not to the full extent that the employers asked. The refusal of the unions to enter into an agreement based on these conclusions, and their subsequent opposition to a further reduction, are evidence, the employers consider, of a policy which would not merely hamper the efficiency of the industry, but ruin it.

In 1930 the wages factor in the cost of production was 82·8 per cent, and the materials factor, including dyes, roughly 50 per cent. Raw materials are bought in the world market; therefore, the employers argue, wages represent the only substantial field in which economies can be effected. British wages are considerably higher than those paid by competitors in foreign countries, and this they believe to be the main reason for the decline in our export trade. Machinery is efficient, and constantly being improved. They have explored other possible avenues of economy, such as rationalisation, and believe that little more can be profitably accomplished in these directions.

Moreover the employers hold that the reductions in wage rates in 1930 and 1931 were fully justified by the fall in the cost of living. According to previous arrangements they had paid an increase on pre-War base rates, plus a percentage fixed in relation to the Board of Trade cost-of-living figure and varied from time to time as the cost-of-living figure varied. At the time of the Macmillan Inquiry the cost-of-living figure was 66 whilst the employers' additional percentage was 72½ to time workers and 56·32 to piece workers. When the Macmillan Report was issued the cost-of-living figure had dropped to 55, but the employers only reduced the percentage to 64 to time workers and 56·32 to piece workers. In September 1931 the cost-of-living figure fell to 45, but the reductions made by the employers were only to 52 and 45·76 respectively. "Since then the cost-of-living figure has been down as low as 36, but no change has been made by the employers, and the

¹ Macmillan Report, at p. 21.

² loc. cit., at p. 16.

operatives have had the advantage of the lower cost-of-living figure for a considerable period."

The majority of the employers who were interviewed did not press for further wage reductions, though a minority contended that the rates are still too high. All are agreed, however, that a change of policy on the part of the unions is necessary if employers and operatives are to work together in the best interests of the industry.

There is a forty-eight-hour week in the industry, and the unions have in the past stood for a policy of restricted overtime. In 1922, after prolonged negotiations, an arrangement was reached whereby a limited amount of overtime could be worked by women and young workers in times of urgency. Even so, the woolcombers' union "rigidly refused to allow its members to work any overtime during a temporary period of great urgency in that section. It is known that, as the result of that union's action, considerable quantities of wool had necessarily to be sent to the Continent to be combed."

The present position seems to be that there is no difficulty in working overtime should it be necessary, and as regards payment there is no uniformity. Several employers expressed the view that this lack of uniformity would lead to grave difficulties when more prosperous times return.

C. General Conditions affecting Output and Efficiency.

With regard to manning of machines, the usual custom in the industry is one weaver one loom.¹ No evidence has been given of trouble in this respect. One firm reported that they were experimenting with the new Northrop automatic looms, which allow one weaver to mind more than one loom, but no other evidence was received on this point.

The use of "service recorders" on scribbling machines was reported by one firm. These recorders mark all stoppages that occur, and form a valuable check on individual output. No mention was made of any trouble arising from their use.

There is no general charge against the unions of deliberate restriction of output. Piece work is in operation in a number of sections, and the union leaders declared

¹ In the worsted manufacturing (dress goods) section of the industry about 90 per cent of the workers watch two looms.

before the Court of Investigation in 1925 that they would welcome its extension. At that same inquiry the employers brought forward evidence to show that the wool-sorters' union have rigidly worked to the "stint" for many years (i.e. they have set a limit on their piece work). The workers replied that this had been encouraged by the employers to promote efficiency. There was some discussion, during which the employers said that they were not making any general charge as to restriction, and, indeed, only mentioned the "stint" in connection with the reduction of wages for which they were asking in that particular section.

III. THE TRADE-UNION REPLY

A. Labour. Apprenticeship in the industry, as has been indicated (p. 301), is confined to a very few occupations. It is the policy of the unions concerned to limit the entry of recruits to the trade, and up till the time of the last dispute they did so quite effectively. Recently, however, the employers have taken advantage of their strong position to start apprentices without the consent of the overlookers' and wool sorters' unions (p. 302). The unions, so soon as they are in a position to do so, are determined to reassert the principle of limitation, which they feel is necessary to protect the interests of the craftsmen. They admit frankly that their policy is to "keep the number limited so that their members can secure higher remuneration." The craftsmen know that their jobs are being threatened by female and unskilled labour, and they will do all they can to guard their own preserve.

B. Hours and Wages. On the debatable question of general wage rates (p. 302), the unions point out that the final recommendation of the Macmillan Report runs as follows :

"I suggest that the council should take the earliest suitable opportunity of simplifying the present wages system."¹

Accordingly, since in their opinion there is no adequate machinery to secure revision, all the chief unions in the

¹ Macmillan Report, at p. 32.

industry have joined together to ask for an inquiry into rates of wages and general industrial conditions as a preliminary to the setting up of a trade board. They dispute very vigorously the employers' contention that the only way in which costs of production can be appreciably lowered is by reductions in wages (p. 308), and the alternatives which they suggest are treated in detail in a later section.¹

The unions do not oppose piece work, but they believe that it is difficult, under existing conditions, to earn a decent wage, and that the figures often quoted give an erroneous impression. Piece-work wages are assumed to be made up of the basic pre-War lists, plus 15·625 per cent because of the shorter working week, plus 45·76 per cent to meet the rise in the cost of living. It should be remembered, however, that in a number of cases the basic rate has been varied downwards. Further, and the unions regard this as a very serious development, the earning capacity of the worker has been adversely affected by the modern tendency to order materials in "short cuts." When an operative was accustomed to average five cuts (300 yards) without changing her loom, she could earn good money. But to-day she may have to change the whole warp after 60 yards, which slows down her rate of production very considerably.

With regard to hours, the unions feel that the present position is very unsatisfactory, and they advance strong arguments to support their view. The industry is supposed to have a forty-eight hour week, and it was in order to safeguard this that the unions adopted the principle of restricted overtime. "The employers seemed to assume that the forty-eight-hour week was simply for the purpose of regulating wages, and that they could work overtime regularly, and that is why we got the Joint Industrial Council to have overtime limited" (p. 304). In the opinion of the unions, recent experience has proved conclusively that they were right in the policy which they advocated, for many of the employers have taken advantage of the breakdown in the conciliation machinery, not only to work regular overtime,² but also to abandon the

¹ See *post*, p. 308.

² A union official stated: "It would be true to say that one half of the firms now adopt the working hours of 6 a.m. to 6 p.m. under the Factory Acts, and the other half work from 7 a.m. to 7 p.m."

forty-eight-hour week as a basis for regulating wage payments.

The unions assert that a number of firms have gone back to the continuous two-shift system, with the result that men come on, when the women finish, to work right through the night. For instance, to work two shifts in the woolcombing section and at the same time to preserve the forty-eight-hour week, it would be necessary to close the plant from 5.15 p.m., when the women go off, until 8.45 p.m., and the men could then work through till the women come on again in the morning. "Actually in many cases the men are following the women at 5.15, and working continuously through till the women come on again. That is, they work over seventy hours a week. The men strongly object to this, but they have no alternative if they want to keep their jobs." In some cases overtime pay, generally at the rate of time and a quarter, may be given, but often the men get nothing more than the ordinary rate (p. 304).

The employers make the assertion that the woolcombers' union has "rigidly refused to allow its members to work any overtime during a period of great urgency," and they regard this as justifying their opposition to the principle of restricted overtime (p. 304). The union challenges this assertion. "The position was that the employers were empowered to take a vote of the operatives about working overtime, and, where the operatives agreed, they were allowed to work overtime. Where the operatives refused to work overtime, no pressure was put upon them by the union to do so." At present the union is not strong enough to put any obstacles in the way of the employers, but they are definitely opposed to systematic overtime as it is now worked. "There are a great number of woolcombers who work from 5 p.m. until 7 a.m. next morning, without a break, night after night. In one case the men actually worked from 5 p.m. on Friday till 7 a.m. on Saturday morning, and then went back again at noon on Saturday and worked until 9 or 10 p.m. that night."

The amount of overtime now being worked is, the unions contend, a proof that trade is improving. Nevertheless, 8.8 per cent of the workers are still unemployed, and it is not right that these men should have to walk the streets while their fellows are being overworked. The unions believe that if the employers would curtail overtime, and work

three shifts instead, the greater part of the unemployed could be reabsorbed. Not only would this be an immense boon to the men themselves, but it would free the public from the burden of their support.

C. Other Conditions. There is little else in the employers' statement that calls for reply. On p. 304 reference is made to the new automatic looms. These are used for light, plain dress-goods, and the workers look after as many as six looms. "So far as the unions are concerned, there has been no opposition whatever to their introduction. . . . The unions have no intention of causing trouble."

In general, while the improvement in trade is encouraging, the unions feel very strongly that many opportunities are being wasted through bad organisation. They consider that there are far too many small men and intermediaries in the wool trade. For instance—a small point, but one which is illustrative of the waste resulting from lack of co-ordination—there is considerable duplication of staffs for the making and sending out of patterns. "There are a hundred and one firms sending out similar patterns to the same customers, and there are hundreds of people needlessly employed on the production of these patterns. This alone must have a big effect upon the cost of production."

Even more disastrous is the prevalence of the middle-man, who, in the opinion of the unions, merely adds to the cost of production without performing any useful function. There are many people "calling themselves manufacturers who own no looms at all, but who will often have their own designs, and get these designs woven into patterns. Having got these designs, they buy yarn from the worsted spinner, and then let it go out to a commission manufacturer and pay for the cloth being manufactured." They hire looms in order to get their cloth manufactured, and so avoid carrying any of the standing charges of the looms themselves. Finally they sell the completed cloth to the merchant, who, in his turn, has to get a price to cover all the pickings taken by these unnecessary intermediaries. The presence of all these small men is sometimes explained on the ground that bigger units would tend to stifle initiative, and destroy the variety in design and kinds of goods which is characteristic of the industry, but the unions do not admit the validity of this contention. They

believe that the real obstacle to reform is the large number of vested interests which have got a stranglehold on the trade.

IV. SUMMARY

Apart from the question of wages, there is no evidence that the trade unions in the wool textile industry are responsible for any restrictive practices. In the past, attempts have been made to restrict entry to the skilled trades, and the wool-sorters' union is said to have encouraged a form of restriction of output known as the "stint." But these practices, according to the employers' own showing, are not operative to-day, though they may reappear in the future.

With regard to wages, the position appears to be that employers in general are fairly well satisfied with the reduced scales now in operation, though these have been achieved in the face of strenuous opposition from the unions. The crux of the matter is the divergence of opinion regarding the amount that the industry can afford to pay its operatives. To pass judgment on this issue would necessitate a detailed review of many subjects which lie outside the province of this inquiry; it must suffice to state that, in 1930, a Court of Inquiry found that the case for a reduction of wages was proved.

The whole dispute has had grave reactions on the industry. The negotiating machinery which had been set up by joint agreement proved unequal to the strain, and the Joint Industrial Council no longer functions. Not only co-operation, but even regular communication, between the employers' federations and the unions has ceased.

It may be argued that the unions should not have invited the arbitration of an independent authority when they were not prepared to accept its conclusions, but it must be admitted that they were in no way bound to do so. Their action may have been ill-advised, since it weakened their position, and it is evident that some employers have taken advantage of that weakness to an unjustifiable extent. It is admitted by the employers' federation that certain firms have reduced their wage rates below the scale recommended by the federation. The unions give examples of the systematic working of overtime, and where this is coupled with a refusal to pay

overtime rates there is strong presumptive evidence of an attack on the forty-eight-hour week. It is deplorable that there should be firms, in any industry, ready to take advantage of the scarcity of employment in this way.

The wage which an operative in any industry should be properly entitled to receive is a matter which is outside the competence of this inquiry. But where a wages dispute results in the breakdown of negotiating machinery, and the weakening of official authority on both sides, it is obvious that the efficiency of the industry must be impaired. The position in the wool textile trade is a grave reflection on the good sense of all those in the industry, and employers and workers must share the responsibility.

TO SUM UP

IN THE FOREGOING SECTIONS we have set out the facts and feelings about trade-union restrictions, and their consequences, which have come to light in the course of our inquiry ; and to each section we have appended a brief commentary of our own—a summary more than a summing up. We have proceeded industry by industry. That, we are sure, was the proper course ; for each of these restrictions is native to its own industry and must be so studied if it is to be rightly gauged. The substance of our task is thereby done, and we might be content to leave it at that ; but the reader is entitled to expect, from those who have been to the trouble to promote and direct this inquiry and to ponder its results, something more than a mere recital of ascertained facts. It now falls to us, therefore, to say in the light of the evidence as a whole what, in our opinion, lies behind the “restriction” issue, and what it amounts to in the industrial scheme of things. If we are not to shirk our duty we must also give some lead as to the rights and wrongs of the matter, and we must suggest what, in our judgment, might be done to ease such stiffness of the industrial joints as our evidence has disclosed.

WAGE POLICY

“Trade-union restrictions” is a vague phrase which can mean any and every stipulation a trade union may make as to the terms and conditions on which its members will sell their labour. We did not invent the term. We took it “as found.” The employers of whom we made our initial inquiries had widely differing views as to what constituted a “trade-union restriction.” Some regarded as the most grievous of all “restrictions” the refusal of the trade unions to agree to a reduction of wages which, in the employers’ view, was essential. We have had to make up our minds whether, for our purposes, resistance to wage reductions was within the category of “restrictions” or not, and in so doing we have come to distinguish between the general level of wages and particular cases of wages

far above that level. As regards the general wage level, our view is that to defend and advance the share obtained by labour of the proceeds of industry is the cardinal object of the trade-union movement, and, if resistance to a reduction of that share is to be held censurable as a "restriction," then the unions are damned from the start, and every other aspect of the matter we are examining is swamped by the wage issue. We are aware of the views held by some high authorities that the maintenance of over-high wages enforced by trade unions is a major cause of the continuance of our trade depression and unemployment. If that be true, then trade-union wage policy is the chief villain of the piece, and is certainly either a "restriction" or worse. But we are aware, too, of the views of equally high authorities that to let the wage level down is to intensify trade depression. If that be true, then trade-union wage policy is the handsome hero who has saved us from the gallows. We are not going to take sides in that world-wide disputation. Our position is that the trade-union policy of standing out for the highest general level of wages and working conditions that can be got without general hurt is not, for our purposes, a "trade-union restriction." We regard wage questions as within our province only where particular industries appear to be harassed and injured by trade-union enforcement of rates which are out of all relation to rates in comparable occupations.

ABNORMAL RATES

Instances of what are alleged to be unconscionable wage rates claimed and exacted in particular occupations or for particular duties do not bulk large in the sum total of the evidence we have presented; but they occur in several sections, notably in docks and in printing. The trade-union justification for these fancy rates will be seen to proceed along three lines. One line, taken in a few cases, is that the wages in question form such a small part of the total cost of the article under production that neither the employer nor the public need care very much what they are. The evidence relating to the London printing trade suggests that a good many employers have no fault to find with that argument; but we, for our part, do not think much

of it. One hears it in all sorts of connections and it is never convincing. Another line is that the work is of such a kind as to be worth the money. This is safe ground so far as argument goes, for no one can prove that a particular kind of work is worth or not worth what is being paid for it. Work, like other things, is worth what it can be made to fetch, and good organisation can make it fetch much more than it otherwise would. So what this contention really amounts to is that where a trade has so organised itself that it is able to make a demand for high rates effective, then whatever rates it can enforce are right. Well, the trade-union movement has no monopoly of that line of argument. The business and professional classes know quite as much about it as the wage-earning classes. We have only two things to say upon it, and we shall say them both several times in the course of this chapter. One is that in the trade-union sphere, as elsewhere, the greedy can overreach himself. Wage-rates so far above the general run as to make the merest bystander say to himself, "There must be a ramp somewhere," tend on the one hand to choke down the demand for whatever article it is that requires such labour, and on the other hand to bring many minds on the employers' side to bear on methods of production which will side-step the wage profiteers. The second is that one looks to the trade-union movement for a higher code than "To each group whatever it can grab." It would not be easy to demonstrate that these exceptionally high rates are invariably enforced at the expense of other wages; but there is a general presumption that this is so, and in particular cases it is quite certainly so. Therefore, the trade-union movement would do well, we think, to look on ransom rates with a dubious rather than an admiring eye. It also seems to us that employers do not make a particularly brave show towards these exceptional rates which are wrung from them under duress; some shrugging their shoulders, others grumbling without making as much as a mild kick. It is a thankless business to side with an employer who has not the courage to side with himself.

OVERTIME AND SPECIAL DUTIES

Much more general in the evidence are complaints of obstruction and extortion in the matter of overtime, night

work, and Sunday work. No employer is reported as contending that work done outside normal working hours or in excess of the normal working week should be done at the ordinary rate. They all take it for granted that extra payment is called for. Their grievances relate, not to the principle of extra payment, but to what they regard as its exploitation and abuse. They relate to cases in which the union tries to ban all working of overtime, or insists on its being limited to a few hours a week, or allows it to be worked only on payment of what the employer regards as exorbitant rates. Union policy in this matter is attacked by employers in almost all the industries into which we have inquired. The only exceptions are iron and steel, where the three-shift system operates, and railways and building, where overtime is worked without fuss and paid for at the agreed extra rates.

Let it be understood that, in most industries, overtime or work done "out of hours" is paid at extra rates. The scales of payment vary from industry to industry, but in almost every case they are progressive. A common formula is time and a quarter for the first two hours, time and a half for the next two, and double time thereafter. A good many employers think this too steep a gradation. They regard the time and a half, and still more the double time, as payments out of all proportion to the inconvenience suffered by the worker or the strain imposed on him. A usual stipulation is double time for work done "out of hours" on Saturday afternoons, Sundays, and holidays. This, too, is regarded by some employers as out of all reason. But, in general, employers accept these traditional overtime terms. In some industries, however, the stipulations complained of go much further. In docks and in printing, cases are quoted of occupations in which, if a man is needed to work overtime, even for a quarter or half an hour, he must be paid for the whole of a "minimum period," often several hours, at the overtime rate.

Limits upon the amount of overtime to be worked are imposed by the trade unions in some industries, quite apart from the matter of graded overtime rates. The engineering and the shipbuilding limit of thirty hours overtime permitted to any man in any four weeks, with arrangements for lifting the limit in specified emergencies, occasions some mild grumbles, but is generally regarded as not

unreasonable. In the furniture trade, where there is no fixed limit, a joint committee representing employers and unions must be satisfied that overtime is necessary before it is allowed. Some contend that the effect of the arrangement is virtually to give the power to limit or veto the working of overtime into the hands of the unions. In cotton the process has gone a stage further, passing from limitation to prohibition. Except as regards maintenance work, the cotton unions flatly refuse to countenance overtime at all. As regards both limits and rates, employers generally, whether holding the view that these overtime stipulations are unreasonable or not, complain that there is too rigid an adherence to the letter of the law, too little give and take, on the part of the trade unions; and employers in those industries which are subject to foreign competition point to the disadvantages under which they suffer as against their foreign rivals, who do not tolerate these embargoes and who either pay no increased rate whatever for overtime or pay on a much lower scale.

Such are the employers' complaints. The trade unions reply to them point by point and offer what they regard as full justification for every condition imposed. The burden of their reply is that overtime is an evil, especially under present conditions; that it can almost always be avoided, and should be avoided; and that the employer who cannot or will not so organise his work as to render it unnecessary must pay a deterrent penalty in the shape of high overtime rates. That is one side of the general justification. The other concerns the workman himself. Systematic overtime, say the unions, cuts into a man's rightful leisure. It also subjects him to the strains of systematic overwork. Spasmodic overtime, they say, breaks without warning into his leisure hours and disorganises his social arrangements and his home life. In either case, the argument goes, he should be well compensated, even to the point of making the employer who detains or summons a worker for a small piece of work pay for a complete turn; for the workman has a right to the planning of his spare time beforehand, and the employer who flouts that right must pay for the uncertainty he creates.

The objection to systematic overtime, however, goes deeper than safeguarding the worker against the effects of a spell of overlong hours: deeper than the aim of

spreading, especially just now, the available work among the greatest possible number. It goes down to an ever-watchful fear of an indirect attack on the 48-hour week. The wool and the cotton workers are prominent among those who suspect systematic overtime of being the thin end of a wedge which, tapped home, would restore the hateful 55½-hour week of the decades before the War.

The dock unions advance a special reason of their own for opposing overtime, and deterring by punitive rates those employers who would make use of it. The dock industry is largely based on casual labour. This the unions regard as an evil, and, so long as it continues, they make it their job to impose conditions which they think will mitigate its worst effects. One of those conditions, successfully enforced, is that the minimum period for which an employer can engage a man is half a day. If occasionally he has a short half-day, so much the better; for he gets full pay and the work that was not ready for him will be there for himself or someone else on a later turn. But if, having done his full tale on any one day, he is required to stay on and work overtime, there is a half-day's work the less for someone else. This is, of course, no other than the argument for making the work go round which we have already noticed, but where in other industries the man who would have had the work if there had been no overtime is an economic abstraction, in the dock industry he is there in the flesh on the next morning's "stand."

That, briefly, is the trade-union case for the limitation and penalisation of overtime. Weighing the evidence, we are bound to say that on the broad issue we are with the trade unions. The working week, as laid down in collective agreements, is in our view quite long enough. No employer should ask his workpeople to work beyond the standard hours, except in cases of real emergency which could not have been foreseen and for which no provision of extra staff could possibly have been made in advance. Employers who will not stand by that principle, who rather than look and plan ahead will habitually wait till the rush is on and then give an order for overtime, should be deterred from that course by vetoes or punitive overtime rates; as also should employers who have nicely calculated the relative cost of additional plant and of overtime and have decided for the latter, and employers who would

accentuate by regular recourse to overtime the evils of the casual-labour system. So far we are with the unions, whose stand against overtime we admire the more in that we know as well as they how many of their members would rejoice as individuals if overtime were forced upon them against their collective principles and will.

So far we are with the unions ; but there are further reaches of this overtime and " out of hours " issue which have to us an ugly look. Some of these trade-union rules and practices might seem to have been framed for the express purpose of blackmailing the employer who, whether through his own fault or not, finds himself in a real fix, out of which there is no way but to call for overtime. The unions explain that in such cases they do not always enforce their rules. That may be ; but it would be better, we think, to modify the rules. If that were done the trade-union position on the main issue would be much strengthened. We would not have the unions abate one jot of their resistance to or penalisation of the employer who has the overtime habit ; but they would do well, we suggest, to introduce a clause which wipes out vetoes, limits, and punitive rates in cases where an emergency need for overtime arises. Such emergencies will occur from time to time, even in the best regulated of establishments. It may not be easy to define " emergency " ; but attempts at it have been made in the collective agreements of some industries. They can be improved upon in the light of experience of their working. Those clauses which have the effect of requiring the payment of a fantastic amount for a few minutes unavoidable overtime should be modified. The unions say the overtime which would be paid at such rates is scarcely ever called for or worked. Naturally so ; no employer would ask for overtime in the face of such a rule except he were in desperate straits. The result is not seen in the money paid over, but in the shifts employers have to make, and in the work they have to let go by, to avoid paying the extortionate rates.

PAYMENT BY RESULTS

There are complaints in some industries—notably building, wood-working, printing, and docks—of the refusal of certain trade unions to allow their members to work under

any form of payment by results. Those who complain regard this as one of the most harmful restrictions under which their branch of industry suffers. Let us say at once that we are not going to plunge into a discussion of piece work *versus* day work in general. We take that line, not just because it is a vexed and vexatious controversy and one that is already widely understood and well documented, but mainly because there is no clear trade-union doctrine on the subject, and no uniformity in trade-union attitude. Payment by results is the traditional and accepted system in the coal, iron and steel, cotton, and wool industries, and very many others. In these industries no one even thinks of questioning it, much less of denouncing it. In other industries, such as engineering and ship-building, some kinds of work have been done, from time immemorial, on piece work, and other kinds on day rate ; and the issue on which employers' and workers' unions have battled for half a century and more has been the extension of payment by piece to jobs customarily done on day rates. In printing, building, wood-working, and in many other industries not covered by our inquiry, the tradition has been much more generally one of day work ; the attempts to introduce piece work have been less whole-hearted or have met with stronger resistance, and day work still holds the greater part of the field, though scrimmages are going on all the time and territory is being won and lost.

It is evident, therefore, that the pros and cons of piece work *versus* day work vary from industry to industry, from occupation to occupation, and almost from job to job. The classical grounds for resisting it are that it destroys craftsmanship, leads to scamping, induces the wrong sort of feeling between man and man, kills the team spirit, encourages overwork to the point of exhaustion, leads to rate-cutting which deprives the men of the rewards of extra exertion, and creates friction and bad blood all round. Every one of those objections will be found, fully expressed, in the evidence ; but always, let it be noted, the speaker means, even if he does not say, "That is our objection to *piece work ON OUR KIND OF WORK.*" The kind of work for which payment by results is resisted is almost always craft work—the production of an ever-varying line of articles or the performance of ever-varying duties for

each of which the craftsman's skill and touch are required and on which shoddy work done under pressure for the sake of high earnings could be hidden. Now much of the work that was formerly done in craft fashion has, for decades past, been going over to mass production ; and in mass repetition work these considerations are no longer of account. Often, in so doing, it goes to a different type and grade of worker, and the craftsman is left jobless ; and in any case it goes almost invariably on to payment by results, or on to that new form of piece work without piece-work payments known as the "conveyor" or "travelling belt" system. No craft union can prevent this taking place. What its members can do is, first, to make a point of turning out work of such volume and quality that neither payment by results nor mass production offers any advantages ; and, second, to be for ever finding new openings for the exercise of their craftsmanship. The digging in of heels is no use ; the situation is one, not for heels, but for minds and hands.

LIMITATION OF PIECE-WORK OUTPUT

There is grumbling here and there at the limits which some unions who have accepted piece work impose on the amount which a piece worker may earn in the week. This naturally never appears in the collective agreement and hardly ever in the rules of the union, but among the members of many unions such limits are said to be an understood thing ; and a man who in the course of the week has turned out so much as to make his earnings come to more than a certain percentage above his standard time rate hears about it in such terms that he takes care not to do it again. The addition allowed ranges in general from 30 to 50 per cent on the weekly time rate ; which means, of course, that a man must not turn out more than that percentage above what is regarded as basis or minimum output. This is "restriction" plain and simple. What have the unions to say about it ?

They say that it is necessary and right to impose such restrictions. The output of the man of exceptional strength or skill who allows himself to work to full capacity is certain, they say, to be held up to his mates as an output all should attain ; and the employer who can resist the

temptation to cut or evade any piece rate on which a man can earn more than time and a half is not yet born. They tell of labour's long and bitter experiences of high output followed by a cutting of rates. We know the history of that, and we endorse what the unions say about it. The trouble here lies in slap-dash methods of estimating basic rates and in what are understood to be guarantees that a rate once fixed will never be altered. Employers who do not know how to arrive at sound basic rates, or who will not take the trouble to do it, must expect and put up with limitations of output, for such employers cannot help cutting rates on which earnings are unduly high, and the men know it. Employers who let it be understood that a money rate once fixed is guaranteed for ever must equally expect and put up with limitation of output as time goes on, for they too will one day have to break their pledge, and the men know it. The way to avoid the imposition of these restrictions is to make a sound job of estimating basic times, to price each job in time instead of in money, and to put it down in writing that basic times will be subject to alteration, but only when there is a change in the job or the process, and then only in consultation between employers and men. In engineering it is now agreed that changes in the piece rate shall not be made unless there are changes in the methods or materials employed. This seems a reasonable stipulation, and if employers and unions in other industries could agree upon some such formula it would help to clear the atmosphere of mutual suspicion which clouds many piece-work negotiations.

FROM HAND TO MACHINE

The evidence discloses how much of the tension that is felt just now in industry arises from attempts by the craft unions to stipulate what shall happen to their members, and to their members' earnings, when a job formerly done by a skilled man with hand tools begins to be done on a machine or with the aid of mechanical appliances. The conflict comes generally over three questions: (1) who shall work the machines or appliances, (2) how many men are required for their operations, and (3) what rates shall be paid to the operators. In many of the instances given, the claim of the union is that the work shall be done on the

machine by the class of man who did it by hand. Sometimes the employer agrees. Where he does not agree, his reason is that the machine has dispensed with the need for that particular kind of skill ; that what he wants on the machine is not craft skill, but operative skill ; that he prefers to train his operative labour from the raw ; and that he does not propose to pay a craft wage for operative work. To this the union retorts that the craftsman from whom the work is being taken has a prior claim and a moral right to work the machine ; that no one knows the feel of the material and the quality of the product required so well as he ; that it will pay the employer to use the craftsman at craft rate rather than the operative at a lower rate ; and that, even if it costs him a little more, he is getting a much greater output from the machine and should not want to make a further profit by employing cheaper labour on it.

We state the broad issue without pronouncing on it. What we have to say at this point is of very general import. The craft unions cannot, even if they would (and they are not so charged), prevent the perfecting of mechanical repetition methods and the development of that precision machining which allows of the fitter being replaced by the assembler. They can put forward their idea of the conditions on which the new machines and appliances shall be introduced ; their members can threaten to walk out if their terms are not accepted, or they can stay in and make trouble right and left ; they can hold things up for a while : but they cannot hope to win a lasting victory. It is not on the cards. Pressure is almost valueless ; all that can count is sound argument based on the intrinsic value of their knowledge and skill. We get the impression that by mixing pressure with argument they have driven neither fully home. In much the same way we feel that employers have been more concerned to win the tussle with the craft unions than to achieve advantage for themselves as well as their men by appreciating the value of trained craft experience in the new mechanical environment and making the fullest possible use of it on generous terms. But what are generous terms ? In some of the cases quoted, the union seems to take the line that nothing short of what beggars the giver is generous. They are cases in which the employer proposes the introduction of a machine or a

set of appliances which will enable the work formerly turned out by a group of craftsmen to be done much more easily and speedily, and in which the union expresses its willingness to agree to the innovation, provided the craftsmen are still employed *and receive the same payment per unit of output as they did before*. That means that the employer is to be permitted to buy, instal, and maintain the new equipment, provided the whole benefit of his enterprise, risk, and expenditure goes to the workers. To say that this kind of claim is "unreasonable" is hardly adequate. The trade-union movement as a whole would do well, we think, to take these particular unions by the ear and tell them they are bringing trade unionism into disrepute.

And yet—indignation is of no use. There is already bitter indignation on the craftsman's part. Machinery has for a long time past been putting them out of employment. Can one expect sweet reason from men who await the next stroke of the axe? If with the new appliances the work previously done can be done with one-third the labour, then, even supposing the employer agrees to use skilled men on the new process, two-thirds are going to lose their job. Their real aim is not to extort suchlike preposterous terms from the employer, but to deter him from bringing in the new plant. Who expects the skilled man just to stand mumchance while the machine that is to dispense with the need for his skill is installed? "What is the craftsman to do?" asks one trade unionist in the evidence here presented. "He has invested his life in the trade and everything he has is at stake." Text-book proofs that labour-saving machinery does not destroy employment mean nothing to him; he knows that mates have lost their jobs to machinery and he may lose his. Of course he will try to put a spoke in the new wheels. His terms are not those of a gangster, but of a die-hard. He will not see his skill cheapened, and his kind put on the streets, without some effort to stop it. The semi-skilled man and the general labourer are in much the same boat. Indeed, aspects of the "machine" question have caused as much bitterness in the cotton industry as in any other; and in cotton there is no strong craft tradition to overcome. In the printing trade, on the other hand, it has proved possible to reach a high degree of mechanisation

and at the same time to preserve and even to strengthen the skilled crafts. No doubt the semi-skilled and unskilled man is in rather a stronger position in that he has less to lose, and can more easily move over into any new employment that the labour-saving machinery may create. The craft unions are bearing the brunt of the attack at the moment, but workmen of all grades are threatened by the introduction of machines and appliances whose immediate result will be the discharging of staff. They know that they are between the devil of losing their jobs and the deep sea of their employer losing his orders. Their best policy, as they see it, is to cheat the devil and risk the drowning.

Is it the best policy? We doubt it. If the trade-union movement as a whole thinks that, at a time like this, further improvements in the technique and apparatus of production should be taboo, let it say so and persuade the nation to make it law. Or let it persuade the nation to the principle propounded by a spokesman of the dock industry, that machinery which displaces labour should be taxed for the benefit of those whom it displaces. Or let it make a case for the patriarchal view, also put forward in the docks evidence, that an industry which has once included a man among its personnel should be thereafter responsible for his maintenance, work or no work. These are rational and honest proposals which would command respect, if not ready support. But the policy of professing welcome to devices which will make production more efficient, and at the same time obliquely doing everything to crab them, is doomed, it seems to us, not merely to fail, but to handicap organised labour in making the best for itself of the new conditions. The strategy is bad, and the tactics are worse. Labour's better course, we think, is to co-operate whole-heartedly in increasing the efficiency of industry, wherever possible taking the lead; to nurse craft skill in its transition from one kind of craftsmanship to another; to use their weight with employers to ensure that all transitions are made with the maximum possible consideration for the workers; to clear out of the way any impediments to the meeting of new demands for industrial products wherever they may arise and in whatever form; and in the meanwhile, so long as the present trade stagnation lasts, to drive home to every section of

the public the right, of those for whom industry cannot find the jobs by which alone they can live, to adequate maintenance.

APPRENTICESHIP

In each of the industry chapters a section dealing with the restrictions imposed by craft unions in the matter of apprenticeship, or more generally in the matter of entry into the trade, will be found. We scheduled this as presumably one of the major trade-union restrictions at the outset of the inquiry ; for we reasoned that in order to be able to enforce upon employers really extortionate stipulations, and especially to be able to keep the market price of its labour at a fancy level, a trade union must by hook or crook contrive a restriction in the supply of people capable of doing that kind of work. Our reasoning was sound so far as it went, but it failed to take account of factors in trade-union strength far more important than a managed scarcity ; and it equally failed to take account of the rarity in these days of any shortage of workpeople for any occupation whatsoever, even the most highly skilled and exclusive of crafts. In very few instances has the evidence revealed clear cases of the price of a particular type of labour being raised by a deliberate limitation of its supply. We might, indeed, have foreseen this had we considered its analogies in the professional field. There are mighty resistances to the lowering of fees and salaries in the professions, and mighty forces at work for their maintenance or improvement ; but deliberate limitation of training for a profession, and deliberate restriction of the issue of the trade-union ticket to practise that profession, is the least among them. Even in the commercial sphere the older method of keeping prices at a fancy level by restricting supplies is rapidly giving place to the provision of ample supplies at fixed prices. Trade-union practice is in line with that of the rest of the community. Surplus or shortage in the number of craftsmen available for work may at negotiation time enter into the balance of considerations and pressures which result in a change in the standard rate, but to a very much smaller extent than might be supposed.

This does not mean that there are no trade-union restrictions on apprenticeship and other forms of entry ; or that

these restrictions do not in any single case lead to shortage. It means only that the restrictions and the shortage, such as they are, are not important elements in any monopoly power the unions may have. Almost everywhere one finds trade-union stipulations in regard to recruitment to the industry—concerning permissible ratios of apprentices or trainees to journeymen, the source of recruitment, the length of training, the method of training, or the terms of engagement and remuneration. In some industries these are no more than rules which the union tries to enforce with more or less success; in others they have been argued and agreed with the employers, and are embodied in collective agreements. The employers in the engineering, shipbuilding, and railway industries stand apart in holding that apprenticeship concerns solely themselves, the boy, and his parent or guardian, and in refusing, as the Engineering Employers' Federation puts it, to "admit the right of any trade union to regulate the wages and conditions of apprentices."

The criticisms made by employers of the apprenticeship policies and practices of trade unions will be found mainly in the industry sections relating to printing, building and wood-working, engineering, and shipbuilding; for it is in these industries that apprenticeship is, and always has been, the recognised means of entry. In 1926 it was officially estimated that there were 137,000 male apprentices in industry generally, and, of these, 101,000 were in the four industries mentioned, that total comprising 59,000 in engineering, 18,000 in shipbuilding, 17,000 in building and wood-working, and 12,000 in printing. In some other of the greatest industries, apprenticeship is hardly known, except in the maintenance occupations. In coal, in iron and steel, and in most branches of the textile industry, for example, young people, when they enter the industry, start for the most part on lower-grade jobs, and may be promoted to a higher grade as they gain age and experience, but there is no uniform provision of systematic training for such posts, and no sort of implication that on coming of age the young person will either be capable of doing such jobs or be entitled to advancement. In these latter industries there is no question of trade-union restriction on recruitment, though there may be difficulties about training.

The charges made from the employers' side in the four industries mentioned (but more in building and wood-working and in printing than in engineering and in ship-building, because of the line taken by the employers' association in the latter industries) are mostly to the effect that the union rules limit the number of apprentices, relative to journeymen, to a proportion which is either not sufficient for the employers' present need or is not sufficient to provide an adequate supply of skilled men for the future. The unions reply that there is no present shortage of skilled men anywhere ; they point to the fact that there are always some of their members out of work. The employers might answer that the existence of scattered twos and threes of a particular kind of craftsman wanting work, though they may make a national total of some hundreds and even thousands, is consistent with the real shortage at busy centres ; but in fact they do not insist very strongly on present shortages. What they stress is rather that, when trade activity reaches normal level again, there will be a shortage. This, too, the unions dispute. Our evidence takes account of the *Report of the Inquiry in Apprenticeship and Training* issued by the Ministry of Labour in 1926, in which calculations were made showing that a shortage of skilled workers was imminent in some crafts where apprenticeship ratios were low. On that the trade-union comment is that, since 1926, trade conditions have worsened and that the figures no longer hold good.

There is a suggestion on the employers' side that the limitation of the numbers of apprentices prevents their having enough lads to do the kind of work which is suited to lads, and results in craftsmen doing work which they ought to regard as beneath them. The unions see precisely that issue in quite another light. They fear the employers' desire for unlimited apprentices is animated by a hope of being able to get men's work done at apprentice boys' wages. It has happened before in the history of the apprentice industries that some employers have gathered hordes of lads into their shops, paid them trumpery wages on the assumption that they were being taught a trade, put them on monotonous repetition work, and at twenty-one turned them off to clutter the ranks of the genuinely skilled, and lower the prestige of journeymanship.

The unions say they do not want that to happen again.

It seems to us that the tensions revealed under this head ought to be more susceptible of easement than any in our catalogue. Despite the heat of the argument, there is here no radical opposition of interest. It is essential to employers and trade unions that there shall be enough youngsters learning the trade to meet all foreseeable needs, and that those who do enter the craft shall have the finest possible training. The question whether the making up of the wastage due to promotion, retirement, and death in any body of men requires a ratio of one apprentice to three journeymen, or one to four, or one to five, is matter capable of actuarial calculation in the light of experience. That is factual and therefore simple. Whether the industry ought to provide for an enlarged or a contracted number of qualified men in the years to come is a more difficult question, but it need not be contentious. It is not very much to the interest of either side to put the expectation of future needs higher or lower than is warranted by the best possible guess on the data available. Whatever the agreed guess may be, the intake of apprentices required follows as a matter of calculation. That settled, it is for the employers' association and the craftsmen's union to co-operate in the essential task of making the apprentice into a good workman. In the building and other industries, joint committees of employers and trade unions have examined the whole apprenticeship position, and in some cases have arrived at joint schemes which are in satisfactory operation. The extension of that kind of joint deliberation and action is the surest way of ending the anomalies and resistances about which complaints are made.

There is another and strong reason for careful estimate and provision of the kind we have outlined; a reason which, as it appears to us from the evidence, has not been fully considered by some amongst both the employers and the unions. When a lad is set to serve his apprenticeship his parents know that for five years or so he will not be self-supporting. In the past the immediate sacrifice was outweighed by the knowledge that at the end of his time he would be set up for life. Now that security has gone. It may be that the next turn of the industrial wheel will reveal the need for craft skill, and spell fortune for the

country that has kept its craft alive and ready, but the signs are not immediately apparent. Many a parent has found that his own apprenticeship training has not prevented him from walking the streets. He sees more and more of the skilled man's preserve disappearing into the maw of the machine, and he may very well think that the prospects of employment do not justify the expense of a similar training for his son.

Questions of ratios and so forth are of relatively small importance compared with the major problem of the future of the skilled man in industry. It is likely that he will survive as an integral part of industrial organisation, or do all the portents such as mass production, upgrading, the conveyor system and the rest really mean that the craftsman, as the term is understood to-day, is doomed to extinction except as regards a few luxury products? With very few exceptions, neither employers nor unions have taken the gloomy view. If, then, they are agreed in desiring to preserve the apprenticeship system with all its implications, it is the more necessary that they should get together to discover the best possible means. Bitter personal experience, and economic necessity, are strong factors working against them.

DEMARCATIION

Demarcation difficulties appear to rank above all other in the irritation they cause. Demarcation is a "frontier" question. Each craft union defines the range of the work that "belongs" to its members. It draws the boundary line of its province, and no one who is not a member of the craft and of the union must do any of the jobs or operations within that boundary. Unhappily the opinions of the various unions as to where the frontier between their respective provinces lies do not always correspond. Here and there a stretch of work-territory is claimed by two and even by three unions. A good illustration of a typical "demarcation" squabble is the case (Building, p. 22) in which bricklayers, tilers, and plasterers all claimed the right to lay a theatre floor, and attempts to assign the work to one or other only led to the downing of tools by the other two. That is one kind of demarcation issue. Another rises out of unions not permitting their members

to put a finger to any work which is not within the confines of their craft dignities ; but such cases are much less common than the border actions of hostile union forces.

The employers' complaint is not only of friction, delay, and loss while unions squabble among themselves ; it is even more that by reason of rigid demarcations he must on occasion use a succession of men of not very widely different crafts for a small job the whole of which from beginning to end any one of the men could do. The making of a doorway from one room to another, which under strict demarcation calls for the attention of bricklayer, joiner, and plasterer (Building, p. 24), is one illustration given ; the fixing of a wash-bowl, with its items reserved for plumber and pipe-fitter, as well as bricklayer, and perhaps joiner and plasterer, is another (Building, p. 21). There are cases in which two or three men must stand by while the " correct " craftsman comes to screw up a bolt or do some other trifle. Particulars are given (Engineering, p. 148) of a case in which two machines needed exactly similar repairs. One was done by men who did not bother about craft distinction. It was finished in one night by two men. The other was done according to strict demarcation rules. It took four men two nights to do it. These cases, and others, read like Western industrial renderings of Eastern social etiquette.

Happily, demarcation troubles are not so serious as they were. They still crop up in the engineering, ship-building, printing, and building and wood-working trades ; but the impression we get from the evidence is that the worst cases quoted are past history, that the really indefensible present-day cases are rare, and that some of the restrictions to which employers take exception are necessary to ensure that responsible work is well and truly done. It is in general highly desirable that jobs should be done by the persons who can do them best. In industry—as in the professions and, indeed, in all walks of life—the person most to be depended on is the one who has had training and experience, and usually the one who has a certificate of competence. When we go to a doctor, a dentist, or a lawyer, we go to a man who holds his trade-union ticket. It may not always guarantee expertness, but it guarantees training and acceptance by a competent authority as trained. It is as important in its way that

our lead pipes and our drains and our paper-hanging and our plastering should be done by a man who has served his time and holds his ticket as that our wills should be drawn, our teeth stopped, and our appendices removed by a similarly qualified and certificated man. That is the main trade-union justification for insisting on each job being done by the right man.

That argument is all very well where high quality of work is all-important, and where the work is being done in an establishment where craftsmen of every kind are on hand. It cannot apply where work of a less vital nature is being done—usually minor alterations or repair work—away from the yard or shop. The solemn procession of man after man to a house or shop or office, each to do one successive fragment of a trumpery job, with all its delays and “walking-time” costs, is not to be justified. To meet this kind of case there should be provision in all trade-union rules—as there is already in some—for the relaxation of craft rigidities on such work done in such circumstances. This appears to us, from the evidence, highly desirable. It would remove the causes of many irritations.

The real issue is not, however, one that can be met by relaxations of ceremonial etiquette. The crucial question for the employer who frets under demarcation restraints is not merely one of men being willing to do jobs outside their traditional crafts boundaries, but of their being capable of doing them. It may be that the time has come for a craftsman to be more versatile. If so, the training given during apprenticeship and the experience for which opportunity is given in “improver” years may both need widening. This is a dominant note in the unions’ replies to the employers’ complaints. One union says, “Owing to lack of proper training, it is impossible to have interchangeability among the different sections of a trade. The remedy lies in the greater all-round training of apprentices” (Shipbuilding, p. 291). Or again, “The employers must reconsider apprenticeship in the light of their subsequent use of men.” Perhaps not for all, let us say; but, at any rate, for a special grade of versatile “handymen” of definite status, commanding exceptional rates, and free of demarcation restrictions within the wider sphere of their special competence. We commend these possibilities

to employers and to trade unionists for joint consideration.

Meanwhile, the situation is being eased by the action of the unions themselves. The trade-union movement is well aware of the damage done and the loss caused (to its members, quite as much as to anyone else) by demarcation difficulties, and is ever seeking to reduce them. One development which will abolish many frontiers is the amalgamation of crafts which are closely akin. The movement toward bringing all pipe-workers (plumbers, hot-water engineers, etc.) into one fold (Building, p. 32) is an excellent example. We look hopefully for more developments along these lines.

Part of the scheme just mentioned is the establishment of a standard uniform rate of wages for all those who come within the proposed amalgamation. Here the employers can do much to help. Much less would be heard, we gather, of demarcation resentments and stubbornness were it not for the differences of a shilling or two a week between the rates of one lot of craftsmen and another. It provokes the suspicion, or, at any rate, the allegation, that the employer is giving border-line work to one set of men rather than the other because their rate is lower. In the shipbuilding industry the employers have met this argument by establishing a uniform standard time rate for all skilled workers. If employers and unions could agree to the general adoption of this policy it would help greatly in the easing of demarcation stresses and strains.

“ CA’ CANNY ”

We have already dealt with the charges of deliberate restriction of output which takes the form of setting an upper limit to piece-work earnings. References will be found in the evidence to other cases, in which there is no question of a fear of rate-cutting, but in which the word goes round, so the employers believe, that a man is expected to take it easy, to keep always well below the output he could easily attain.

The evidence includes extracts from actual trade-union rules under which fines are imposed for finishing a piece of work too soon ; but it is not certain how far these rules are really operative. Otherwise the charges are vague and unsupported by evidence. Necessarily so, perhaps ;

for, even where the amount a man ought to do in the way of a reasonable day's work is known beyond cavil, it is not enough to show that less is being done. It must be shown that the fault lies nowhere but with the man and that it is an organised affair.

The trade unions rebut charges of this nature with counter-charges that deficient outputs are mostly due to faults and failures for which the management and not the men are responsible. The examining of these counter-charges in detail is beyond our "demarcation" boundary. We content ourselves with summing up our impressions on the point. Slack masters make slack men, and it needs no trade-union villainy to account for men putting very little into their part of the joint business of production when the employer sets the example. An employer should know just what is a fair day's work from each and every man ; if he does not, he can neither praise, blame, nor judge aright. His intelligence section is at fault and he had better get it mended. He should see that work is not held up by staff bungling and sloppiness. It might almost be said that the employer who suffers "ca' canny" has asked for it and deserves what he gets. But that does not exonerate the trade union that gives the wink and the nod to slacking. The right sort of trade union has standards of working conduct independent of the virtues or failings of employers. The dry-rot of "ca' canny" can moulder a union more surely than it can ruin an industry. No union can afford to play about with it. Those employers do best, we are convinced, who recognise the great part the workpeople can play in making a good organisation work at a good speed and to good purpose. Several of the trade-union spokesmen express the wish that employers would more generally seek the collaboration of their workers in matters of workshop organisation and control. The trade-union conscience, we may say, is not quite so clear on the point as some of these would like to have it thought ; many a gesture of the kind on the part of employers has met with the wrong response ; but quite as often the response has been right. Where that has been so, great success has followed and trouble over "trade-union restrictions" has been at a minimum.

RESTRICTION AND STRENGTH OF ORGANISATION

The evidence presented inclines us to the view that restrictive stipulations and practices are at least as common where the organisations of workers and employers are feeble or in a bad way as where they are strong and effective. In the furniture industry, for instance, while the employers complain of opposition to piece work, of undue restriction of apprentices, and of indifferent output, the unions allege that piece work is being established in despite of agreements, that the market is being flooded by cheap juvenile labour, and that the standard wages are not being paid. Each side accuses the other of lack of control over its members, and it is clear that the absence of any unifying organisation amongst either party is helping to aggravate the existing causes of discontent and to provoke restrictive action. In cotton the same tendency is apparent. Here both employers and workers are organised in a large number of associations, very often local in origin and outlook. On the employers' side particularly there is a marked lack of unity of purpose. The spinners criticise the weavers, and the weavers pass the blame on to the finishing trades. There is little sign of any official recognition that the interests of the industry are more important than those of the sections. The woollen and worsted industry is in hardly better case. In both these great textile industries the organisations on both sides are at odds with themselves and with each other. The machinery of negotiation has broken down. To explore that is not our present business ; enough that, in common with everyone else who cares for industry and for its people, we deplore it. We only want to insist that the escape from onerous trade-union restrictions is not to be found in the disintegration of either the men's or the employers' organisation.

OLD AGREEMENTS

We have been struck by the frequency with which the blame for stupid and annoying restrictions is laid, in the evidence, upon the antiquity of the clauses in collective agreements relating to workshop practices, and of the price lists upon which piece-work earnings are computed. Many of these appear to have been drawn up and embodied

in agreements at a time when industrial processes and products were so very different that it requires an antiquarian to translate some of them into the language of modern conditions. In one case cited, the rates for work done with the aid of elaborate derricks and gantries are being calculated on a basis that relates to hand-work and bare poles. There are lists in use in the cotton industry which date from 1860. That is one kind of case. Another is where clauses regulating workshop practices, recruitment, etc., were agreed without much consideration during the fevered years of war and the spacious days of 1919 and 1920, and still remain in the collective agreements although trade conditions are entirely different, and there would be not the remotest chance of such stipulations being agreed now if a new agreement were being negotiated. The position seems to be that either one or both parties to these agreements, with their obsolete clauses, fear to suggest or allow a modification of the clauses lest the whole agreement should go into the melting-pot and be recast in an unfavourable mould. Where that is the reason for the perpetuation of irrational restrictions, nothing can be done by outside agencies except to pray that the timorous parties to the hoary agreement may develop a little more confidence and courage for themselves, and faith in the decency of the other side, scrap the old text, and negotiate a new one suited to the conditions of to-day.

That concludes our summing up. We have tried to bring out the main facts of trade-union restrictions and to show their bearings. We have given hints of where our opinions lie, and we have made suggestions here and there for remedial action. The evidence and our commentary are both before the reader ; he must arrive at his own verdict. For our part, in asking ourselves what, on the evidence, trade-union restrictions amount to in the industrial order, our first very definite feeling is that the obstructions to industrial efficiency and improvement set up by trade unions are nothing like so serious as is commonly alleged, or taken for granted, in places where industrial small-talk is exchanged. It is not only that the rather scandalous cases are rare ; it is also that many trade-union restrictions, which the layman, hearing them complained of, might regard as "a bit steep," can be shown to have

ample justification. To assume that whenever and wherever a trade union refuses to allow an employer to do something which he says is essential, the employer is in every case right and the trade union wrong is merely foolish. Industry is hedged about with safeguards, and very properly so. The State imposes restrictions which some of the more retrograde employers have resented at every stage in the history of protective legislation—restrictions concerned with health and safety. Many trade-union stipulations have similar objects. It is right that the trade unions should set forth the conditions on which their members should work, and that employers should have to take account of the demands and negotiate upon them.

It is, moreover, clear to us that restrictive practices imposed by trade unions are actually fewer than they were, and of less importance. Employers in a number of industries have referred to conditions in their father's or grandfather's time, and have admitted that, comparatively, their own grounds for complaint are small. Restrictions which were imposed in the days when the social conscience was less active have become obsolete and have disappeared. Both trade unions and employers have learnt through experience, and there is a deal more reasonableness than there used to be.

That said, we can go on to say that some of the trade-union restrictions detailed in the evidence seem to us injudicious, and others strike us as wholly indefensible. We wonder that the employers have tolerated such terms, injurious to the unions as much as to themselves because injurious to the industry and particularly to the craft within the industry; and we feel no surprise that they should have sought methods of production which would give the obstructive craftsman the go-by. We think the unions practising these restrictions might usefully be subjected to pressure by the inner councils of trade unionism.

We feel indeed, that the central trade-union organisation should take the lead in dealing with some of these evils. The most obvious case concerns demarcation disputes. In these, the employer is often helpless, and it is useless to expect the unions concerned to act as judge in a case to which they are parties. Conflict over border lines between the unions are a matter of internal politics; it should not

be beyond the competence of the central authority to determine such questions.

This authority—the Trade Union Congress—has come to a position of great power, and power carries with it responsibility. In our study of this matter we have been struck by the fact that, while there is often a “labour” as opposed to an “employer” viewpoint, it is also true that there are conflicting testimonies within the labour attitude. If the full weight of the trade-union movement is to be put behind each and all of these demands, it will lose in effect and authority. We think that the Trade Union Congress would be well advised to take the line that its support is dependent on its approval of the policy set forward by the individual union. Convincing leadership demands a consistent outlook, and the courage to maintain that the interests of the whole are more important than those of the part.

But by far the greater part of the restrictions revealed fall into a middle range, where the issue is “a conflict of two rights.” Here we plead for greater readiness on the union side to submit restrictive rules or clauses to reconsideration in the light, not of ancient history, but of modern needs. The relations of employers and employed are sometimes held to be fundamentally a precarious balance of hostile forces in which the peace is kept from day to day solely by fear—on the one side, of a strike; on the other, of a lock-out. We think that a mistaken view. Our industrial system, like our civilised life, hangs together because the tendency to be reasonable is stronger than the tendency to be unreasonable. Those people and institutions which from time to time take up attitudes, and indulge in practices, that flout the general sense of reasonableness must pull themselves up or they will be pulled down. We ask employers and trade unionists to look squarely at their attitude on this matter of restrictions, and to ask themselves in each case, “Is it reasonable?” If in their hearts they are compelled to say “No,” let them act accordingly.

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